

11/10/08

370. N. Datta*, H.L. Holtorf, J.A. Jansen, and A.G. Mikos, "In Vitro Synthesis of Osteoinductive Extracellular Matrix for Bone Tissue Engineering," 7th World Biomaterials Congress, Sydney, Australia, May 18, 2004.
371. J.K. Tessmar*, C.R. Rieger, M.A. Burrell, and A.G. Mikos, "Synthesis of Unsaturated Fumarate-Based Macromers and their Crosslinked Hydrogels," 7th World Biomaterials Congress, Sydney, Australia, May 18, 2004.
372. E.L. Hedberg*, C.K. Shih, M.D. Timmer, J.J. Lemoine, M.A.K. Liebschner, J.A. Jansen, and A.G. Mikos, "In Vitro Degradation of Poly(Propylene Fumarate)-Based Controlled Release Scaffolds," 7th World Biomaterials Congress, Sydney, Australia, May 19, 2004.
373. M.E. Gomes*, H.L. Holtorf, R.L. Reis, and A.G. Mikos, "Influence of the Porosity of Starch-Based Fiber Meshes on the Proliferation and Osteogenic Differentiation of Marrow Stromal Cells Cultured under Flow Perfusion," 7th World Biomaterials Congress, Sydney, Australia, May 20, 2004.
374. H.L. Holtorf*, J.A. Jansen, and A.G. Mikos, "Effect of Dexamethasone on Osteodifferentiation of MSC/Scaffold Constructs under Flow Perfusion," 7th World Biomaterials Congress, Sydney, Australia, May 20, 2004.
375. E.L. Hedberg*, H.C. Kroese-Deutman, C.K. Shih, R.S. Crowther, D.H. Carney, A.G. Mikos, and J.A. Jansen, "Controlled Release from Biodegradable Polymeric Scaffolds for Repair of Segmental Bone Defects," 7th World Biomaterials Congress, Sydney, Australia, May 21, 2004.
376. T.A. Holland*, J.K. Tessmar, Y. Tabata, and A.G. Mikos, "Growth Factor Release from Injectable, Enzymatically-Degradable Hydrogel Composites for Cartilage Tissue Engineering," 7th World Biomaterials Congress, Sydney, Australia, May 21, 2004.
377. H. Ueda*, S. Jo, D.M. Ammon, and A.G. Mikos, "Sustained Release of Fluocinolone Acetonide from Photo-Crosslinked Poly(Propylene Fumarate) Matrices," 31st International Symposium on Controlled Release of Bioactive Materials, Honolulu, Hawaii, June 12, 2004.
378. M.E. Gomes*, C.M. Bossano, C.M. Johnston, R.L. Reis, and A.G. Mikos, "Bone Growth Factors Expressed by Marrow Stromal Cells Cultured on Starch/Polycaprolactone Fiber Mesh Scaffolds under Flow Perfusion Conditions," Joint Meeting of Tissue Engineering Society International and European Tissue Engineering Society, Lausanne, Switzerland, October 11, 2004.
379. H. Park*, J.S. Temenoff, and A.G. Mikos, "Injectable Biodegradable Hydrogels for TGF- α 1 and Chondrocyte Delivery for Cartilage Tissue Engineering," Joint Meeting of Tissue Engineering Society International and European Tissue Engineering Society, Lausanne, Switzerland, October 12, 2004.
380. M. Wettergreen*, B. Bucklen, A.G. Mikos, and M.A.K. Liebschner, "Tailoring the Mechanical Environment of Scaffolds with Computer Aided Design and Rapid Prototyping," Annual BMES Fall Meeting, Philadelphia, Pennsylvania, October 14, 2004.
381. H. Castano*, J.F. Alvarez-Barreto, J. van den Dolder, J.A. Jansen, A.G. Mikos, and V.I. Sikavitsas, "The Ability of Marrow Stromal Cells to Regenerate Bone Is Controlled by their Differentiation Stage," Annual BMES Fall Meeting, Philadelphia, Pennsylvania, October 16, 2004.
382. A.G. Mikos*, "Synthetic Polymers for Tissue Engineering," Annual AIChE Meeting, Austin, Texas, November 8, 2004.

11/10/08

383. H. Castano, J. van den Dolder, J.A. Jansen, A.G. Mikos, and V.I. Sikavitsas*, "The Differentiation Stage of Marrow Stromal Osteoblasts Influences their Ability to Induce In Vivo Bone Formation in an Orthotopic Site," Annual AIChE Meeting, Austin, Texas, November 10, 2004.
384. A.G. Mikos*, "Biodegradable, In-Situ Crosslinkable Hydrogels as Injectable Carriers for Cell and Drug Delivery," Southeastern Regional ACS Meeting, Research Triangle Park, North Carolina, November 12, 2004.
385. A.G. Mikos*, "Drug and Cell Delivery from Injectable, Biodegradable Polymeric Scaffolds for Tissue Engineering," MRS Fall Meeting, Boston, Massachusetts, November 29, 2004.
386. A.S. Mistry*, A.R. Barron, and A.G. Mikos, "In Vitro Accelerated Degradation of a Poly(Propylene Fumarate)-Based/Alumoxane Nanocomposite for Bone Tissue Engineering," 22nd Annual Conference of the Houston Society for Engineering in Medicine and Biology, Houston, Texas, February 10, 2005.
387. C.-Y. Lin*, R.M. Schek, A.S. Mistry, X. Shih, A.G. Mikos, P.H. Krebsbach, and S.J. Hollister, "Functional Bone Tissue Engineering Using Ex Vivo Gene Therapy and Topology Optimized, Biodegradable Polymer Composite Scaffolds," Annual Meeting of Orthopaedic Research Society, Washington, D.C., February 20, 2005.
388. T.A. Holland*, E.W.H. Bodde, L.S. Baggett, Y. Tabata, A.G. Mikos, and J.A. Jansen, "Osteochondral Repair in the Rabbit Model Utilizing Oligo(Poly(Ethylene Glycol) Fumarate) Hydrogel Scaffolds," Annual Meeting of Orthopaedic Research Society, Washington, D.C., February 21, 2005.
389. M.A. Wettergreen, W. Sun, A.G. Mikos, and M.A.K. Liebschner*, "Geometric Characterization of Scaffold Building Blocks for Tissue Engineering," Annual Meeting of Orthopaedic Research Society, Washington, D.C., February 21, 2005.
390. M.E. Gomes*, R.L. Reis, and A.G. Mikos, "Bone Marrow Stromal Cells Cultured on Starch Based Three-Dimensional Scaffolds in a Flow Perfusion Bioreactor: A Promising In-Vitro Approach for Obtaining Bone Tissue Substitutes," Annual Meeting of Orthopaedic Research Society, Washington, D.C., February 21, 2005.
391. T.G. Chu*, R.L. Stewart, S.J. Warden, C.H. Turner, and A.G. Mikos, "A Load-Bearing, Biodegradable BMP Carrier for Bone Regeneration in a Segmental Defect," Annual Meeting of Orthopaedic Research Society, Washington, D.C., February 21, 2005.
392. A.G. Mikos*, "Injectable Scaffolds for Bone and Cartilage Tissue Engineering," 12th International Symposium on Recent Advances in Drug Delivery Systems, Salt Lake City, Utah, February 24, 2005.
393. X. Shi*, J. Hudson, P.P. Spicer, R. Krishnamoorti, J.M. Tour, and A.G. Mikos, "Rheological Behavior and Mechanical Reinforcement of Poly(Propylene Fumarate)-Based Single-Walled Carbon Nanotube Composites," 30th Annual Meeting of the Society For Biomaterials, Memphis, Tennessee, April 28, 2005.
394. H.L. Holtorf*, J.A. Jansen, and A.G. Mikos, "Flow Perfusion Culture Induces the Osteoblastic Differentiation of Marrow Stromal Cell-Scaffold Constructs in the Absence of Dexamethasone," 30th Annual Meeting of the Society For Biomaterials, Memphis, Tennessee, April 29, 2005.
395. H.L. Holtorf*, N. Datta, J.A. Jansen, and A.G. Mikos, "Pore Size of Fiber Mesh Scaffolds Affects the Osteoblastic Differentiation of Seeded Marrow Stromal Cells Cultured in a Flow Perfusion Bioreactor," 30th Annual Meeting of the Society For Biomaterials, Memphis, Tennessee, April 30, 2005.

11/10/08

396. A.G. Mikos*, "Engineering Complex Orthopaedic Tissues," Tissue Engineering: The Next Generation Workshop, Cambridge, Massachusetts, May 3, 2005.
397. H.L. Holtorf, J.A. Jansen, and A.G. Mikos*, "Modulation of Cell Differentiation in Bone Tissue Engineering Constructs Cultured in a Bioreactor," 2nd Aegean Conference on Tissue Engineering, Crete, Greece, May 24, 2005.
398. W.J.E.M. Habraken*, J.G.C. Wolke, A.G. Mikos, and J.A. Jansen, "Calcium Phosphate/PLGA Microsphere Composites: Physical Properties and Degradation Characteristics," 2nd Aegean Conference on Tissue Engineering, Crete, Greece, May 24, 2005.
399. F.K. Kasper*, S.K. Seidlits, M.A. Barry, and A.G. Mikos, "In Vitro Release of Plasmid DNA from Oligo(Poly(Ethylene Glycol) Fumarate) Hydrogels," 32nd International Symposium on Controlled Release of Bioactive Materials, Miami Beach, Florida, June 22, 2005.
400. F.K. Kasper*, T. Kushibiki, Y. Kimura, A.G. Mikos, and Y. Tabata, "In Vivo Release of Plasmid DNA from Composites of Oligo(Poly(Ethylene Glycol) Fumarate) and Cationized Gelatin Microspheres," 32nd International Symposium on Controlled Release of Bioactive Materials, Miami Beach, Florida, June 22, 2005.
401. A.G. Mikos*, T.A. Holland, F.K. Kasper, and J.S. Temenoff, "Cell and Bioactive Factor Delivery from Injectable, Biodegradable Hydrogel Scaffolds for Tissue Engineering," 3rd International Conference on Materials for Advanced Technologies, Singapore, July 8, 2005.
402. H.L. Holtorf, J.A. Jansen, and A.G. Mikos*, "Modulation of Cell Differentiation in Bone Tissue Engineering Constructs Cultured in a Flow Perfusion Bioreactor," 7th International Bone Fluid Flow Workshop, New York, New York, September 21, 2005.
403. S.A. Moore*, J. Tessmar, and A.G. Mikos, "Matrix Metalloproteinase-Sensitive Hydrogels for Articular Cartilage Engineering," Annual BMES Fall Meeting, Baltimore, Maryland, September 29, 2005.
404. M.C. Hacker* and A.G. Mikos, "Novel Macromers for the Formation of Injectable, Calcium-Binding, In Situ Hardening Hydrogels," Annual BMES Fall Meeting, Baltimore, Maryland, September 29, 2005.
405. A.S. Mistry*, A.R. Barron, A.G. Mikos, and J.A. Jansen, "Degradation and Biocompatibility of a PPF-Based/Alumoxane Nanocomposite for Bone Tissue Engineering," Annual BMES Fall Meeting, Baltimore, Maryland, September 30, 2005.
406. Z.S. Patel*, Y. Tabata, and A.G. Mikos, "In Vitro Release of Vascular Endothelial Growth Factor from Gelatin Microparticles," Annual BMES Fall Meeting, Baltimore, Maryland, October 1, 2005.
407. A.G. Mikos*, "Biodegradable Polymers for Tissue Engineering," Texas/United Kingdom Symposium on Medicine and Medical Devices, Rice University, Houston, Texas, October 10, 2005.
408. A.G. Mikos*, "Trends in Tissue Engineering Research: An Editor's Perspective," 8th Annual Meeting of Tissue Engineering Society International, Shanghai, China, October 22, 2005.
409. N. Datta, Q.P. Pham, U. Sharma*, V.I. Sikavitsas, J.A. Jansen, and A.G. Mikos, "In Vitro Generated Extracellular Matrix and Fluid Shear Stress Synergistically Enhance 3D Osteoblastic Differentiation," 8th Annual Meeting of Tissue Engineering Society International, Shanghai, China, October 23, 2005.

11/10/08

410. A.S. Mistry*, M. Hacker, A.R. Barron, and A.G. Mikos, "Accelerated Degradation of a PPF-Based/Alumoxane Nanocomposite for Bone Tissue Engineering: Mechanical Properties and Macromolecular Structure," 8th Annual Meeting of Tissue Engineering Society International, Shanghai, China, October 24, 2005.
411. H. Park*, J.S. Temenoff, and A.G. Mikos, "Injectable Oligo(Poly(Ethylene Glycol) Fumarate) Hydrogel Composites for Concurrent Delivery of Marrow Stromal Cells and Growth Factors," 8th Annual Meeting of Tissue Engineering Society International, Shanghai, China, October 24, 2005.
412. U. Sharma, Q.P. Pham*, N. Datta, and A.G. Mikos, "Using Bone-like ECM Produced In Vitro to Influence Osteoblastic Differentiation of Marrow Stromal Cells," Annual AIChE Meeting, Cincinnati, Ohio, November 3, 2005.
413. A.G. Mikos*, "Injectable Hydrogel Composites," 6th Symposium of International Cartilage Repair Society, San Diego, California, January 10, 2006.
414. H. Park*, T.A. Holland, J.S. Temenoff, and A.G. Mikos, "Injectable Biodegradable Hydrogel Composites for Cell and Growth Factor Delivery for Cartilage Tissue Engineering," 6th Symposium of International Cartilage Repair Society, San Diego, California, January 10, 2006.
415. M.C. Hacker*, B.B. Ma, and A.G. Mikos, "Macromers for Injectable Cell Carriers for Tissue Engineering Applications," 24th Scientific Conference of Society for Physical Regulation in Biology and Medicine, Cancun, Mexico, January 11, 2006.
416. M.C. Hacker and A.G. Mikos*, "Design of Injectable Biodegradable Polymers for Tissue Regeneration," 24th Scientific Conference of Society for Physical Regulation in Biology and Medicine, Cancun, Mexico, January 12, 2006.
417. A.G. Mikos*, "Bioreactors for Bone Tissue Engineering," Regenerate World Congress on Tissue Engineering and Regenerative Medicine, Pittsburgh, Pennsylvania, April 25, 2006.
418. B. Sitharaman*, L.A. Tran, P.P. Spicer, I. Rusakova, A.G. Mikos, and L.J. Wilson, "Fabrication and Characterization of Carbon Nanostructure In Situ Crosslinkable Composites for Bone Tissue Engineering," Regenerate World Congress on Tissue Engineering and Regenerative Medicine, Pittsburgh, Pennsylvania, April 25, 2006.
419. M.C. Hacker*, B.B. Ma, J.D. Kretlow, and A.G. Mikos, "Novel Macromers for the Fabrication of Injectable, Calcium-Binding Hydrogels," 31st Annual Meeting of the Society For Biomaterials, Pittsburgh, Pennsylvania, April 27, 2006.
420. F.K. Kasper*, E. Jenkins, K. Tanahashi, M.A. Barry, Y. Tabata, and A.G. Mikos, "Characterization of DNA Release from Composites of Oligo(Poly(Ethylene Glycol) Fumarate) and Cationized Gelatin Microspheres In Vitro," 31st Annual Meeting of the Society For Biomaterials, Pittsburgh, Pennsylvania, April 27, 2006.
421. B. Sitharaman*, L.A. Tran, R.D. Bolskar, S.D. Flamm, R. Muthupillai, A.G. Mikos, and L.J. Wilson, "Gd@(Carbon Nanostructures) as Nanoprobes for Cellular Magnetic Resonance Imaging," 31st Annual Meeting of the Society For Biomaterials, Pittsburgh, Pennsylvania, April 28, 2006.
422. A.G. Mikos*, "Biomaterials for Tissue Engineering," Rebuilding Humans: The Seattle Tissue Engineering Initiative Symposium, Seattle, Washington, May 27, 2006.
423. A.G. Mikos*, "Polymeric Systems in Tissue Engineering and Regeneration," 1st Marie Curie Cutting Edge InVENTS Conference on New Developments on Polymers for Tissue Engineering, Replacement and Regeneration, Madeira, Portugal, June 1, 2006.

11/10/08

424. A.G. Mikos*, "New Developments on Polymers for Tissue Engineering, Replacement and Regeneration," 1st Marie Curie Cutting Edge InVENTS Conference on New Developments on Polymers for Tissue Engineering, Replacement and Regeneration, Madeira, Portugal, June 2, 2006.
425. A.G. Mikos*, "Nanobiomaterials for Tissue Engineering," Symposium on Nanomedicine and Tissue Engineering in Memory of Professor C.J. Lee, National Tsing Hua University, Hsinchu, Taiwan, June 23, 2006.
426. A.G. Mikos*, "In Vitro Generation of Extracellular Matrix for Use as a Tissue Engineering Scaffold," Conference Celebrating Thirty Years of Robert Langer's Science, Cambridge, Massachusetts, July 15, 2006.
427. J.K. Tessmar*, M.A. Burrell, A. Rivelli, A.M. Goepferich, and A.G. Mikos, "Modification of the Release from Oligo(Poly(Ethylene Glycol) Fumarate) Based Hydrogels by Copolymerization with Lipophilic Poly(Propylene Glycol)," 33rd Annual Meeting and Exposition of Controlled Release Society, Vienna, Austria, July 24, 2006.
428. F.K. Kasper*, S. Young, K. Tanahashi, M.A. Barry, Y. Tabata, J.A. Jansen, and A.G. Mikos, "Evaluation of Bone Regeneration by DNA Release from Composites of Oligo(Poly(Ethylene Glycol) Fumarate) and Cationized Gelatin Microspheres in a Critical-Sized Calvarial Defect," 33rd Annual Meeting and Exposition of Controlled Release Society, Vienna, Austria, July 23, 2006.
429. Z.S. Patel*, Y. Tabata, and A.G. Mikos, "Gelatin Microparticles for the Controlled Release of an Angiogenic and an Osteogenic Growth Factor," 33rd Annual Meeting and Exposition of Controlled Release Society, Vienna, Austria, July 23, 2006.
430. A. Saraf, M. Hacker, and A.G. Mikos*, "Synthesis of a Poly(Ethylenimine) Conjugate of Hyaluronic Acid for Gene Delivery Applications," 33rd Annual Meeting and Exposition of Controlled Release Society, Vienna, Austria, July 25, 2006.
431. A.G. Mikos*, "Bioreactors for Tissue Engineering," 9th Annual Meeting of Japanese Society for Tissue Engineering, Kyoto, Japan, September 8, 2006.
432. M.C. Hacker*, J.D. Kretlow, L. Klouda, B.B. Ma, and A.G. Mikos, "Synthesis and Characterization of Novel Calcium-Binding Macromers for Injectable Tissue Engineering," Annual BMES Fall Meeting, Chicago, Illinois, October 13, 2006.
433. A. Haesslein, M.C. Hacker*, H. Ueda, D.M. Ammon, R.N. Borazjani, J.F. Kunzler, J.C. Salamone, and A.G. Mikos, "Long-Term Release of Glaucoma Therapeutics from Photo-Crosslinked Poly(Propylene Fumarate) Matrices," Annual BMES Fall Meeting, Chicago, Illinois, October 14, 2006.
434. A.G. Mikos*, "Delivery of DNA, Proteins, and Cells with Injectable Hydrogels," US-Japan Joint Topical Conference on Medical Engineering, Drug Delivery Systems and Therapeutic Systems, Annual AIChE Meeting, San Francisco, California, November 13, 2006.
435. E. Christenson*, W. Soofi, N. Cameron, and A.G. Mikos, "Biodegradable Fumarate-Based PolyHIPEs as Tissue Engineering Scaffolds," Annual AIChE Meeting, San Francisco, California, November 14, 2006.
436. M.B. Murphy* and A.G. Mikos, "The Hydroxyapatite Affinity and Binding Kinetics of Peptides Modified with Bisphosphonates, Poly(Aspartic Acid), and Poly(Glutamic Acid)," Annual AIChE Meeting, San Francisco, California, November 14, 2006.
437. M.C. Hacker*, L. Klouda, B.B. Ma, J.D. Kretlow, and A.G. Mikos, "Novel Thermally Responsive Macromers for the Fabrication of Injectable, In Situ Crosslinkable Hydrogels," Annual AIChE Meeting, San Francisco, California, November 14, 2006.

11/10/08

438. U. Sharma, Q. Pham*, and A.G. Mikos, "Flow Perfusion Culture of Marrow Stromal Cells on Electrospun Polycaprolactone Scaffolds," Annual AIChE Meeting, San Francisco, California, November 17, 2006.
439. A.G. Mikos*, "Injectable Hydrogels for Stem Cell Delivery," 1st International Collaborative Symposium on Stem Cell Research, Seoul, Korea, December 8, 2006.
440. A.G. Mikos*, "Nanobiomaterials for Tissue Engineering," International Conference on Biomedical and Pharmaceutical Engineering, Singapore, December 11, 2006.
441. A.G. Mikos*, "Delivery of DNA, Proteins and Cells with Injectable Scaffolds," International Conference on Biomedical and Pharmaceutical Engineering, Singapore, December 12, 2006.
442. A.G. Mikos*, "Biomaterials in Tissue Engineering," Edith and Peter O'Donnell Award Lecture, Annual Conference of The Academy of Medicine, Engineering and Science of Texas, Austin, Texas, January 4, 2007.
443. A.G. Mikos*, "Delivery of DNA, Proteins, and Cells with Injectable Hydrogels," Symposium on Musculoskeletal Biology, Stem Cells and Clinical Translation: A Celebration of Arnold Caplan's 65th Birthday, Case Western Reserve University, Cleveland, Ohio, January 12, 2007.
444. H.-H. Chen*, A.G. Mikos, Q.P. Pham, U. Sharma, and Z.-P. Luo, "Finite Element Analyses of Flow Field in Multilayer Nanofiber/Microfiber Scaffolds," Annual Meeting of Orthopaedic Research Society, San Diego, California, February 11, 2007.
445. E.M. Christenson*, W. Soofi, N.R. Cameron, and A.G. Mikos, "Biodegradable Fumarate-Based PolyHIPEs as Tissue Engineering Scaffolds," Annual Meeting of Orthopaedic Research Society, San Diego, California, February 11, 2007.
446. E.M. Christenson*, W. Soofi, J.L. Holmes, N.R. Cameron, and A.G. Mikos, "Biodegradable PolyHIPEs as Tissue Engineering Scaffolds for Craniofacial Reconstruction," Annual Meeting of the International Association for Dental Research, New Orleans, Louisiana, March 23, 2007.
447. S.C.G. Leeuwenburgh*, J.A. Jansen, and A.G. Mikos, "Functionalization of Oligo(Poly(Ethylene Glycol) Fumarate) Hydrogels with Finely Dispersed Calcium Phosphate Nanocrystals for Bone-Substituting Purposes," 32nd Annual Meeting of the Society For Biomaterials, Chicago, Illinois, April 19, 2007.
448. H. Park, J.S. Temenoff, and A.G. Mikos*, "In Vitro Chondrogenic Differentiation of Rabbit Marrow Stromal Cells Encapsulated in Oligo(Poly(Ethylene Glycol) Fumarate) Injectable Hydrogel Composites," 32nd Annual Meeting of the Society For Biomaterials, Chicago, Illinois, April 19, 2007.
449. X. Shi, B. Sitharaman, Q.P. Pham, J.L. Hudson, L.J. Wilson, J.M. Tour, and A.G. Mikos*, "In Vitro Cytotoxicity of Single-Walled Carbon Nanotube/Poly(Propylene Fumarate) Nanocomposites," 32nd Annual Meeting of the Society For Biomaterials, Chicago, Illinois, April 19, 2007.
450. E.M. Christenson*, W. Soofi, J.L. Holmes, N.R. Cameron, and A.G. Mikos, "High Porosity Tissue Engineering Scaffolds by Emulsion Templating," 32nd Annual Meeting of the Society For Biomaterials, Chicago, Illinois, April 20, 2007.
451. F.K. Kasper* and A.G. Mikos, "Drug Delivery and Bioreactor Strategies in Tissue Engineering," 1st Summer School of the European Chapter of the Tissue Engineering and Regenerative Medicine International Society: Key Elements of Tissue Engineering, Madeira, Portugal, June 3, 2007.

11/10/08

452. F.K. Kasper* and A.G. Mikos, "Biomimetic Strategies for Tissue Engineering of Bone," 3rd Marie Curie Cutting Edge InVENTS Conference on Biomineralisation of Polymeric Materials, Bioactive Biomaterials and Biomimetic Methodologies, Madeira, Portugal, June 4, 2007.
453. Q.P. Pham, F.K. Kasper*, U. Sharma, A.S. Mistry, A.W. Yasko, J.A. Jansen, and A.G. Mikos, "Osteoinductive Capacity and Angiogenicity of an In Vitro Generated Extracellular Matrix," 3rd Marie Curie Cutting Edge InVENTS Conference on Biomineralisation of Polymeric Materials, Bioactive Biomaterials and Biomimetic Methodologies, Madeira, Portugal, June 6, 2007.
454. E.W.H. Bodde*, O.C. Boerman, F.G.M. Russel, A.G. Mikos, P.H.M. Spauwen, and J.A. Jansen, "Bone Response to Cranial Calcium Phosphate Cement Implants with a High and Low Dose of rhBMP-2 in Rats," Tissue Engineering and Regenerative Medicine International Society – North America Conference and Exposition, Toronto, Canada, June 14, 2007.
455. F.K. Kasper, Q.P. Pham, and A.G. Mikos*, "Generation of Tissue Engineering Scaffolds with a Flow Perfusion Bioreactor," 8th International Bone Fluid Flow Workshop, New York, New York, September 14, 2007.
456. K. Kim*, D. Dean, A.G. Mikos, and J.P. Fisher, "Effect of Cell Seeding Density on Osteogenic Signaling of Bone Marrow Stromal Cells in 3D Scaffolds," Annual BMES Fall Meeting, Los Angeles, California, September 27, 2007.
457. A.G. Mikos*, "Biomaterials in Tissue Engineering," Robert A. Pritzker Distinguished Lecturer Award Lecture, Annual BMES Fall Meeting, Los Angeles, California, September 28, 2007.
458. S. Young*, C. Nguyen, J.D. Kretlow, A.G. Mikos, and M. Wong, "Poly(Propylene Fumarate) Scaffolds with Surface Porosity for Space Maintenance of Mandibular Defects," Annual Meeting of the American Association of Oral and Maxillofacial Surgeons, Honolulu, Hawaii, October 11, 2007.
459. C. Nguyen*, S. Young, J.D. Kretlow, M. Wong, and A.G. Mikos, "Soft Tissue Response to Implantation of Hybrid Poly(Propylene Fumarate) Scaffolds in a Critical Size Mandibular Defect," Annual Meeting of the American Association of Oral and Maxillofacial Surgeons, Honolulu, Hawaii, October 11, 2007.
460. A.G. Mikos*, "Nanobiomaterials for Tissue Engineering," Integrated Research Team Meeting on Nanotechnology Solutions for Long-Term Implantable Devices, Houston, Texas, October 24, 2007.
461. A.S. Mistry, Q. Pham, C. Schouten, T. Yeh, A.G. Mikos*, and J.A. Jansen, "In Vivo Hard Tissue Response and Degradation of Porous Fumarate-Based Polymer/Alumoxane Nanocomposites for Bone Tissue Engineering," Annual AIChE Meeting, Salt Lake City, Utah, November 5, 2007.
462. A.G. Mikos*, "Biomaterials for Drug Delivery and Tissue Engineering," Annual Meeting of the Dutch Society for Biomaterials and Tissue Engineering, Lunteren, The Netherlands, December 12, 2007.
463. L. Klouda*, M.C. Hacker, J.D. Kretlow, and A.G. Mikos, "Synthesis and Characterization of Novel Thermoresponsive, Chemically Crosslinkable Macromers for the Fabrication of In Situ Forming Hydrogels," 25th Annual Conference of the Houston Society for Engineering in Medicine and Biology, Houston, Texas, February 8, 2008.

11/10/08

464. J.D. Kretlow*, M.C. Hacker, L. Klouda, and A.G. Mikos, "Injectable Calcium-Binding Macromers for Bone Tissue Engineering," 25th Annual Conference of the Houston Society for Engineering in Medicine and Biology, Houston, Texas, February 8, 2008.
465. H. Park*, J.S. Temenoff, Y. Tabata, A.I. Caplan, R.M. Raphael, J.A. Jansen, and A.G. Mikos, "Effect of Dual Growth Factor Delivery on Chondrogenic Differentiation of Rabbit Marrow Mesenchymal Stem Cells Encapsulated in Injectable Hydrogel Composites," 25th Annual Conference of the Houston Society for Engineering in Medicine and Biology, Houston, Texas, February 8, 2008.
466. X. Guo, H. Park*, and A.G. Mikos, "In Vitro Osteogenic Differentiation of Rabbit Mesenchymal Stem Cells Encapsulated in Biodegradable Hydrogel Composites," 25th Annual Conference of the Houston Society for Engineering in Medicine and Biology, Houston, Texas, February 8, 2008.
467. A.G. Mikos*, "Nanobiomaterials for Bone Tissue Engineering," Conference on Regenerative Endodontics, Nova Southeastern University, Fort Lauderdale, Florida, February 22, 2008.
468. A.G. Mikos*, "Synthetic Scaffolds for Tissue Engineering," 10th Anniversary Celebration of Korean Tissue Engineering and Regenerative Medicine Society Meeting, Seoul, Korea, May 23, 2008.
469. J. Liao*, X. Guo, Q.P. Pham, F.K. Kasper, and A.G. Mikos, "Effect of Transforming Growth Factor- β 1 on Chondrogenic Differentiation of Mesenchymal Stem Cells Cultured on Biodegradable Microfiber Scaffolds," 8th World Biomaterials Congress, Amsterdam, The Netherlands, May 29, 2008.
470. S.A. Chew*, M.C. Hacker, and A.G. Mikos, "Biodegradable Hyperbranched Polycationic Polymers with Varying Hydrophilic Spacer Length for Gene Delivery," 8th World Biomaterials Congress, Amsterdam, The Netherlands, May 29, 2008.
471. A.M. Martins, Q.P. Pham, P.B. Malafaya, R.A. Sousa, M.E. Gomes, F.K. Kasper, R.L. Reis*, and A.G. Mikos, "The Role of Lipase and α -amylase in both the Degradation of Starch/Polycaprolactone Fiber Meshes and the Osteogenic Differentiation of Rat Marrow Stromal Cells," 8th World Biomaterials Congress, Amsterdam, The Netherlands, May 29, 2008.
472. A.G. Mikos* and F.K. Kasper, "Tissue Engineering and Its Future Perspective," 8th World Biomaterials Congress, Amsterdam, The Netherlands, May 31, 2008.
473. S. Danti*, D. D'Alessandro, A.S. Mistry, A. Saraf, S. Berrettini, and A.G. Mikos, "Tissue Engineered Constructs as Human Ossicular Chain Replacements," 8th World Biomaterials Congress, Amsterdam, The Netherlands, May 31, 2008.
474. M. van der Zande*, B. Sitharaman, A. Veltien, X.F. Walboomers, J.S. Ananta, L.J. Wilson, A.G. Mikos, A. Heerschap, and J.A. Jansen, "In Vivo MRI Visualization of the Distribution Pattern of Gadolinium Labeled Single Walled Carbon Nanotubes Released from Subcutaneous Implanted Poly(Lactic-co-Glycolic Acid) Scaffolds in Rats," 8th World Biomaterials Congress, Amsterdam, The Netherlands, May 31, 2008.
475. L. Klouda*, M.C. Hacker, J.D. Kretlow, and A.G. Mikos, "Novel Thermoresponsive, In Situ Crosslinkable Hydrogels for Tissue Engineering," 8th World Biomaterials Congress, Amsterdam, The Netherlands, June 1, 2008.
476. B. Sitharaman, X. Shi, X.F. Walboomers, H. Liao, V. Cuijpers, L.J. Wilson, A.G. Mikos*, and J.A. Jansen, "Ultra-Short Single Walled Carbon Nanotube/Biodegradable Polymer

11/10/08

- Nanocomposites for Bone Tissue Engineering: Hard and Soft Tissue Responses in a Rabbit Model," 8th World Biomaterials Congress, Amsterdam, The Netherlands, June 1, 2008.
477. A.G. Mikos*, "From Material to Tissue: Biomaterial Development and Tissue Engineering," A Celebration of Excellence in Scientific and Engineering Achievement on the Occasion of Nicholas Peppas' 60th Birthday, Austin, Texas, August 8, 2008.
 478. A.G. Mikos*, "Bioengineering Technologies in Regenerative Medicine," Annual Symposium of Baylor College of Medicine Medical Scientist Training Program, Galveston, Texas, August 23, 2008.
 479. F.K. Kasper, R.A. Thibault, and A.G. Mikos*, "Mineralized Extracellular Matrix Constructs for Bone Tissue Engineering," 10th International Symposium on Biomineralization, Lianyungang, China, September 3, 2008.
 480. R.A. Thibault*, F.K. Kasper, and A.G. Mikos, "Extracellular Matrix Constructs Enhance the Osteogenic Differentiation of Marrow Stromal Cells In Vitro," 3rd Aegean Conference on Tissue Engineering, Rhodes, Greece, September 22, 2008.
 481. A.G. Mikos*, Z.S. Patel, and S. Young, "Multi-Growth Factor Controlled Release for Bone Tissue Engineering," 3rd Aegean Conference on Tissue Engineering, Rhodes, Greece, September 24, 2008.
 482. F.K. Kasper*, X. Guo, H. Park, and A.G. Mikos, "Growth Factor and Cell Delivery for Cartilage Tissue Engineering," 3rd Aegean Conference on Tissue Engineering, Rhodes, Greece, September 24, 2008.
 483. A.G. Mikos*, "Bioreactor Fabrication of Mineralized Bioactive Constructs for Tissue Engineering," International Conference on Research Strategy of Tissue Engineering, Jinan, China, October 25, 2008.

* Speaker

Invited Lectures at Universities and Companies

1. "Hepatocyte Scaffolding and Liver Regeneration," Ben Gurion University of the Negev, Department of Chemical Engineering and Bioengineering Program, Beer Sheva, Israel, May 28, 1992.
2. "Liver Regeneration by Hepatocyte Transplantation," Texas Biotechnology Corporation, Houston, Texas, October 30, 1992.
3. "Tissue Engineering by Cell Transplantation," Baylor College of Medicine, Department of Medicine, Houston, Texas, February 22, 1993.
4. "Creation of a Liver Organoid by Hepatocyte Transplantation," Baylor College of Medicine, Department of Pathology, Houston, Texas, March 23, 1993.
5. "Osteoblast Culture on Biodegradable Polymer Scaffolds to Engineer Bone," NASA Lyndon B. Johnson Space Center, Houston, Texas, December 6, 1993.
6. "Extracellular Matrix Analogs to Engineer Tissues," Houston Matrix Assembly, M.D. Anderson Cancer Center, Houston, Texas, March 7, 1994.
7. "Polymer Processing Technology for Organ Regeneration," ETH Zürich, Chair of Biocompatible Materials Science and Engineering, Zürich, Switzerland, March 11, 1994.
8. "Osteoblast Culture on Biodegradable Polymer Scaffolds to Engineer Bone," The University of Texas Health Science Center at San Antonio, Department of Orthopaedics, San Antonio, Texas, March 25, 1994.

11/10/08

9. "Biodegradable Polymer Scaffolds to Engineer Trabecular Bone," The University of Michigan, Bioengineering Program, Ann Arbor, Michigan, January 23, 1995.
10. "Engineering Human Tissues," Southeast Texas Chapter of AIChE, Beaumont, Texas, March 14, 1995.
11. "Orthopaedic Biomaterials for Bone Regeneration and Repair," Osteobiologics, San Antonio, Texas, June 15, 1995.
12. "Biodegradable Polymer Scaffolds for Tissue Engineering," CytoTherapeutics, Providence, Rhode Island, October 6, 1995.
13. "Engineering Human Tissue," University of Houston, Bioengineering Research Center, Houston, Texas, November 3, 1995.
14. "Engineering Trabecular Bone Using Biodegradable Polymers," Texas Medical Center Chapter of Sigma Xi, Houston, Texas, November 21, 1995.
15. "Engineering Trabecular Bone Using Biodegradable Polymers," University of Houston, Department of Chemical Engineering, Houston, Texas, December 1, 1995.
16. "Bone Tissue Engineering Using Biodegradable Polymer Scaffolds," Cornell University, Department of Chemical Engineering, Ithaca, New York, February 13, 1996.
17. "Bone Tissue Engineering," State University of New York at Buffalo, Department of Chemical Engineering, Buffalo, New York, May 28, 1996.
18. "Bone Tissue Engineering," Princeton University, Department of Chemical Engineering and Princeton Materials Institute, Princeton, New Jersey, September 18, 1996.
19. "Bone Tissue Engineering," Center for Bio/Molecular Science and Engineering, Naval Research Laboratory, Washington, D.C., October 4, 1996.
20. "Tissue Engineering," The University of Texas Health Science Center at San Antonio, Department of Surgery, Division of Oral & Maxillofacial Surgery, San Antonio, Texas, December 19, 1996.
21. "Bone Tissue Engineering Using Biodegradable Polymer Scaffolds," The Cleveland Clinic Foundation, Department of Biomedical Engineering, Cleveland, Ohio, April 25, 1997.
22. "Guided Bone Regeneration Using Biodegradable Polymer Scaffolds," Johnson&Johnson Corporate Biomaterials Center, Somerville, New Jersey, June 2, 1997.
23. "Guided Bone Regeneration Using Biodegradable Polymer Scaffolds," Osiris Therapeutics, Baltimore, Maryland, July 16, 1997.
24. "Biodegradable Polymers for Peripheral Nerve and Vascular Tissue Engineering," Princeton University, Department of Chemical Engineering and Princeton Materials Institute, Princeton, New Jersey, September 24, 1997.
25. "Guided Bone Regeneration Using Biodegradable Polymer Scaffolds," University of Maryland, Department of Chemical Engineering, College Park, Maryland, October 14, 1997.
26. "Guided Bone Regeneration Using Biodegradable Polymer Scaffolds," University of Toledo, Department of Bioengineering, Toledo, Ohio, October 31, 1997.
27. "Biodegradable Polymers for Tissue Engineering," University of California Santa Barbara, Department of Chemical Engineering, Santa Barbara, California, November 6, 1997.
28. "Guided Bone Regeneration Using Biodegradable Polymer Scaffolds," Texas A&M University, Department of Chemical Engineering, College Station, Texas, December 5, 1997.

11/10/08

29. "Guided Bone Regeneration Using Biodegradable Polymer Scaffolds," Oklahoma State University, Department of Chemical Engineering, Stillwater, Oklahoma, February 12, 1998.
30. "Biodegradable Polymers for Tissue Engineering," Pittsburgh Tissue Engineering Initiative, Pittsburgh, Pennsylvania, February 19, 1998.
31. "Engineering Human Tissue," The Dean's Series: The School of Engineering, Rice University, Houston, Texas, April 15, 1998.
32. "Biodegradable Polymers for Tissue Engineering," University of Utah, Department of Pharmaceuticals and Pharmaceutical Chemistry, Salt Lake City, Utah, May 13, 1998.
33. "Biodegradable Polymers for Tissue Engineering," University of Toronto, Department of Chemical Engineering and Applied Chemistry, Toronto, Canada, June 3, 1998.
34. "Biodegradable Materials for Tissue Engineering," Valley Tissue Engineering Center, Albert-Ludwigs-University, Department of Plastic and Hand Surgery, Freiburg, Germany, July 11, 1998.
35. "Biodegradable Polymers for Tissue Engineering," University of Regensburg, Department of Pharmaceutical Technology, Regensburg, Germany, July 13, 1998.
36. "Biodegradable Polymers for Tissue Engineering," Pennsylvania State University, Department of Chemical Engineering, State College, Pennsylvania, September 22, 1998.
37. "Engineering Human Tissue," Rice University, Department of Mathematics, Houston, Texas, October 15, 1998.
38. "Injectable Biomaterials for Tissue Engineering," Purdue University, Department of Industrial and Physical Pharmacy, West Lafayette, Indiana, October 27, 1998.
39. "Biodegradable Polymers for Tissue Engineering," State University of New York at Buffalo, Department of Chemical Engineering, Buffalo, New York, April 9, 1999.
40. "Engineering Human Tissue," Rice University, Alumni College 1999, Houston, Texas, April 18, 1999.
41. "Injectable Biomaterials for Tissue Engineering," Novartis Pharmaceuticals, Summit, New Jersey, April 27, 1999.
42. "Bone Tissue Engineering Using Biodegradable Polymer Scaffolds," Johns Hopkins University, Department of Chemical Engineering, Baltimore, Maryland, May 26, 1999.
43. "Orthopaedic Tissue Engineering," Korea Research Institute of Chemical Technology, Taejeon, Korea, September 14, 1999.
44. "Synthetic Polymers as Non-Viral Vectors for Gene Therapy," Shell Center for Gene Therapy, Baylor College of Medicine, Houston, Texas, October 5, 1999.
45. "Synthetic Biomaterials as Non-Viral Vectors for Gene Therapy," Distinguished Lecture Series in Nanomaterials and Biomaterials, University of Maryland, Department of Materials and Nuclear Engineering, College Park, Maryland, November 12, 1999.
46. "Synthetic Polymers for Tissue Engineering and Gene Therapy," University of Akron, Department of Chemical Engineering, Akron, Ohio, February 10, 2000.
47. "Synthetic Polymers for Tissue Engineering and Gene Therapy," Northwestern University, Department of Chemical Engineering, Evanston, Illinois, April 6, 2000.
48. "Synthetic Polymers for Tissue Engineering and Gene Therapy," Translation of Biomaterials Research into Biotechnology Symposium, Materials Research Science and Engineering Center, University of Chicago, Chicago, Illinois, April 8, 2000.
49. "Injectable Biodegradable Polymers for Tissue Engineering," Chrystalis BioTechnology, Galveston, Texas, May 31, 2000.

11/10/08

50. "Synthetic Polymers for Tissue Engineering and Gene Therapy," University of Nijmegen, Department of Biomaterials, Nijmegen, The Netherlands, June 23, 2000.
51. "Injectable Biodegradable Polymers for Tissue Engineering," Becton Dickinson Technologies, Research Triangle Park, North Carolina, July 21, 2000.
52. "Synthetic Polymers for Tissue Engineering and Gene Therapy," Kyoto University, Institute for Frontier Medical Sciences, Kyoto, Japan, July 31, 2000.
53. "Injectable Biomaterials for Guided Bone Regeneration," Tokyo Women's Medical University, Institute of Biomedical Engineering, Tokyo, Japan, November 18, 2000.
54. "Synthetic Biomaterials as Non-Viral Vectors for Gene Delivery," Parker H. Petit Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, Georgia, January 25, 2001.
55. "Bioreactor Design for Three-Dimensional Cell-Polymer Constructs in Bone Tissue Engineering," The University of Michigan, Department of Biomedical Engineering, Ann Arbor, Michigan, March 5, 2001.
56. "Synthetic Biodegradable Polymers for Tissue Engineering," American Society of Materials International, Houston Chapter, Houston, Texas, March 6, 2001.
57. "Synthetic Biodegradable Polymer Scaffolds for Bone Tissue Engineering," Disc Dynamics, Inc., Minnetonka, Minnesota, April 24, 2001.
58. "Synthetic Biodegradable Polymer Scaffolds for Bone Tissue Engineering," Mayo Clinic, Biomedical Engineering Program, Rochester, Minnesota, April 27, 2001.
59. "Synthetic Biodegradable Polymer Scaffolds for Bone Tissue Engineering," University of South Carolina, Department of Chemical Engineering, Columbia, South Carolina, May 10, 2001.
60. "Poly(Ethylenimine) as a Gene Delivery Vehicle and Its Potential for Gene Therapy," Baylor College of Medicine, Department of Molecular Physiology and Biophysics, Houston, Texas, October 16, 2001.
61. "Biomimetic Hydrogels for Bone Tissue Engineering," Purdue University, NSF Program on Therapeutic and Diagnostic Devices, School of Chemical Engineering, and Department of Biomedical Engineering, West Lafayette, Indiana, October 25, 2001.
62. "Synthetic Biodegradable Polymers for Bone Tissue Engineering," Medtronic Sofamor Danek, Memphis, Tennessee, January 29, 2002.
63. "Synthetic Biodegradable Polymers for Bone Tissue Engineering," Baylor College of Medicine, Division of Plastic Surgery, Houston, Texas, February 1, 2002.
64. "Bioreactor Technology for Bone Tissue Engineering," University of Pittsburgh, McGowan Institute for Regenerative Medicine, Pittsburgh, Pennsylvania, February 6, 2002.
65. "Bioreactor Technology for Bone Tissue Engineering," Arizona State University, Department of Bioengineering, Tempe, Arizona, February 20, 2002.
66. "Injectable, In Situ Crosslinkable, Biodegradable Polymers for Peptide and Gene Delivery," Bausch & Lomb, Rochester, New York, June 11, 2002.
67. "Bioreactor Technology for Bone Tissue Engineering," Rensselaer Polytechnic Institute, Department of Biomedical Engineering, Troy, New York, October 9, 2002.
68. "Engineering Human Tissue," Baylor College of Medicine, Medical Scientist Training Program, Houston, Texas, October 17, 2002.

11/10/08

69. "Bioreactor Technology for Bone Tissue Engineering," Michigan State University, Department of Chemical Engineering and Materials Science, East Lansing, Michigan, February 6, 2003.
70. "Bone Tissue Engineering Using Biodegradable Polymers," Baylor College of Medicine, Department of Pediatrics, Endocrine and Metabolism Section, Houston, Texas, March 13, 2003.
71. "Synthetic Polymers for Tissue Engineering," Carnegie Mellon University, Department of Biomedical Engineering, Pittsburgh, Pennsylvania, June 4, 2003.
72. "Intraocular Delivery Systems for Fluocinolone Acetonide Using Biodegradable Fumarate-Based Polymers," Bausch & Lomb, Rochester, New York, July 30, 2003.
73. "Fluid Flow in Tissue Engineering of 3D Bone Scaffolds," Case Western Reserve University, Department of Biomedical Engineering, Cleveland, Ohio, September 19, 2003.
74. "Tissue Engineering," NWO | Huygens Lecture, Netherlands Organization for Scientific Research, The Hague, The Netherlands, November 5, 2003.
75. "Fluid Flow in Tissue Engineering of 3D Bone Scaffolds," Advanced Materials Research Center, Nanyang Technological University, Singapore, December 3, 2003.
76. "Fluid Flow in Tissue Engineering of 3D Bone Scaffolds," Duke University, Department of Biomedical Engineering, Durham, North Carolina, January 8, 2004.
77. "New Scaffolding Technologies for Tissue Engineering," Baylor College of Medicine, Center for Tissue Repair, Regeneration and Engineering, Houston, Texas, February 6, 2004.
78. "Tissue Engineering," Rice University, Department of Mechanical Engineering and Materials Science, Houston, Texas, February 6, 2004.
79. "Synthetic Polymers for Tissue Engineering," ETH Zürich, Institute of Chemical and Bioengineering, Zürich, Switzerland, February 23, 2004.
80. "Biodegradable, In Situ Crosslinkable Hydrogels as Injectable Carriers for Cell and Drug Delivery," Roger Malkin Distinguished Lecture, Mississippi State University, Mississippi State, Mississippi, March 4, 2004.
81. "Drug and Cell Delivery from Injectable, Biodegradable Polymeric Scaffolds for Tissue Engineering," Procter and Gamble Lecture, Iowa State University, Department of Chemical Engineering, Ames, Iowa, April 22, 2004.
82. "Drug and Cell Delivery from Injectable, Biodegradable Polymeric Scaffolds for Tissue Engineering," Institute of Bioengineering and Nanotechnology, Singapore, June 3, 2004.
83. "Injectable Hydrogels for Cell and Growth Factor Delivery," Genzyme Corporation, Cambridge, Massachusetts, August 31, 2004.
84. "Drug and Cell Delivery from Injectable, Biodegradable Polymeric Scaffolds for Tissue Engineering," Tulane University, Department of Chemical and Biomolecular Engineering, New Orleans, Louisiana, September 10, 2004.
85. "Drug and Cell Delivery from Injectable, Biodegradable Polymeric Scaffolds for Tissue Engineering," University of Iowa, College of Pharmacy, Iowa City, Iowa, September 20, 2004.
86. "Engineering Human Tissue," Rice University, Alumni College 2005, Houston, Texas, February 27, 2005.
87. "Injectable Biodegradable Polymeric Scaffolds for Tissue Engineering," University of California, Irvine, Department of Biomedical Engineering, Irvine, California, April 14, 2005.

11/10/08

88. "Biodegradable Polymers for Orthopaedic Tissue Engineering," Stryker Orthopaedics Corporation, Mahwah, New Jersey, May 17, 2005.
89. "Modulation of Cell Differentiation in Bone Tissue Engineering Constructs Cultured in a Bioreactor," Symposium on New Trends in Biomaterials-Tissue Engineering, National University of Singapore, Singapore, July 9, 2005.
90. "Biodegradable Polymeric Drug Delivery Systems for Ocular Applications," Bausch & Lomb, Rochester, New York, August 4, 2005.
91. "Injectable Biodegradable Polymer Scaffolds for Tissue Engineering," Nano-scale Delivery of Drugs, Genes, and Cells-The Changing Face of Biomaterials, Pharmaceutical Sciences Symposium Honoring the Career of Professor Joseph R. Robinson, University of Wisconsin, Madison, Wisconsin, October 14, 2005.
92. "Injectable Biodegradable Polymer Scaffolds for Tissue Engineering," Columbia University, Department of Biomedical Engineering, New York, New York, November 11, 2005.
93. "Development of an Osteoinductive Bone Graft," State University of New York at Stony Brook, Department of Biomedical Engineering, Stony Brook, New York, February 15, 2006.
94. "Bioreactors for Bone Tissue Engineering," The University of Texas M.D. Anderson Cancer Center, The Bone Disease Program of Texas, Houston, Texas, February 17, 2006.
95. "Tissue Engineering at Rice," Rice University, Alumni College 2006, Houston, Texas, March 5, 2006.
96. "Development of an Osteoinductive Bone Graft," Baylor College of Medicine, Department of Orthopaedic Surgery, Houston, Texas, March 17, 2006.
97. "Bioreactors for Bone Tissue Engineering," Johns Hopkins University, Department of Materials Science and Engineering, Baltimore, Maryland, April 5, 2006.
98. "Bioreactors for Bone Tissue Engineering," Vanderbilt University, Department of Chemical Engineering, Nashville, Tennessee, April 10, 2006.
99. "Development of an Osteoinductive Bone Graft," Koret Foundation Lecture, University of California Davis, Department of Orthopaedic Surgery, Sacramento, California, June 15, 2006.
100. "Injectable Hydrogel Composites for Articular Cartilage Tissue Engineering," Kyoto University, Department of Biomaterials, Field of Tissue Engineering, Institute for Frontier Medical Sciences, Kyoto, Japan, September 9, 2006.
101. "Bioreactors for Tissue Engineering," The Cleveland Clinic, Clinical Tissue Engineering Center, Cleveland, Ohio, September 21, 2006.
102. "Development of an Osteoinductive Bone Graft," Georgia Institute of Technology, Coulter Department of Biomedical Engineering and Parker H. Petit Institute for Bioengineering and Bioscience, Atlanta, Georgia, October 5, 2006.
103. "Development of an Osteoinductive Bone Graft," University of Virginia, Department of Biomedical Engineering, Charlottesville, Virginia, December 1, 2006.
104. "Biomaterials for Tissue Engineering," DSM Biomedical Materials, Geleen, The Netherlands, March 8, 2007.
105. "Nanobiomaterials for Tissue Engineering," Purdue University, School of Chemical Engineering, West Lafayette, Indiana, March 20, 2007.

11/10/08

106. "Biomaterials for Tissue Engineering," Shanghai Jiao Tong University, Shanghai Ninth People's Hospital, National Tissue Engineering Center of China, Shanghai, China, May 9, 2007.
107. "Biomaterials for Tissue Engineering," Tsinghua University, School of Materials Science and Engineering, Beijing, China, May 11, 2007.
108. "Biomaterials for Tissue Engineering," Fourth Military Medical University, School of Stomatology, Center for Tissue Engineering, Xi'an, China, May 17, 2007.
109. "Nanobiomaterials for Tissue Engineering," Baylor University, Department of Chemistry and Biochemistry, Waco, Texas, September 7, 2007.
110. "Nanobiomaterials for Tissue Engineering," University of Pennsylvania, Department of Bioengineering, Philadelphia, Pennsylvania, September 13, 2007.
111. "Biomaterials in Tissue Engineering," James Gibb Johnson Distinguished Visiting Lecture, University of Tennessee Health Science Center, Department of Biomedical Engineering and Imaging, Memphis, Tennessee, October 12, 2007.
112. "Biomaterials in Tissue Engineering," University of Dayton, Center for Tissue Regeneration and Engineering, Dayton, Ohio, November 1, 2007.
113. "Nanobiomaterials for Bone Tissue Engineering," Centenary Seminar Series Lecture, Imperial College, Department of Chemical Engineering and Chemical Technology, London, England, November 14, 2007.
114. "Bone Regeneration Using Biodegradable Polymers," Baylor College of Dentistry, Department of Biomedical Sciences, Dallas, Texas, February 13, 2008.
115. "Bone Tissue Engineering," Rice University, Susanne M. Glasscock School of Continuing Studies, Houston, Texas, March 13, 2008.
116. "Synthetic Scaffolds for Tissue Engineering," Texas A&M University, Department of Biomedical Engineering, College Station, Texas, March 17, 2008.
117. "Biomaterials in Tissue Engineering," Robert A. Pritzker Distinguished Lecture, Illinois Institute of Technology, Department of Biomedical Engineering, Chicago, Illinois, March 28, 2008.
118. "Polymer Scaffolds for Bone Tissue Engineering," University of California Santa Barbara, Department of Chemical Engineering, Santa Barbara, California, April 3, 2008.
119. "Synthetic Scaffolds for Bone Tissue Engineering," University of Illinois at Urbana-Champaign, Department of Chemical and Biomolecular Engineering, Urbana, Illinois, April 8, 2008.
120. "Synthetic Scaffolds for Tissue Engineering," Laval University, Laboratoire d'Organogénèse Expérimentale, Québec, Canada, May 5, 2008.
121. "Controlled Delivery of Angiogenic and Osteogenic Growth Factors for Bone Tissue Engineering," Seoul National University Hospital, Department of Orthopedic Surgery, Seoul, Korea, May 23, 2008.
122. "Scaffolds for Tissue Engineering," Academy of Military Medical Sciences, Tissue Engineering Research Center, Beijing, China, September 1, 2008.
123. "Mineralized Extracellular Matrix Constructs for Bone Tissue Engineering," University of California Santa Barbara, Department of Chemical Engineering, Santa Barbara, California, October 8, 2008.
124. "Synthetic Scaffolds for Tissue Engineering," University of Houston, Department of Pharmacological and Pharmaceutical Sciences, Houston, Texas, October 22, 2008.

11/10/08

Chair of Meetings

1. Materials Research Society Fall Meeting (Forty-One Symposia), Boston, Massachusetts, November 27 - December 1, 2000.
2. Aegean Conference on Tissue Engineering Science (Eight Sessions), Mykonos, Greece, May 19-23, 2002.
3. Engineering in Medicine and Biology Society - Biomedical Engineering Society Joint Conference (Two Hundred Fourteen Sessions), Houston, Texas, October 23-26, 2002.
4. Second Aegean Conference on Tissue Engineering (Twelve Sessions), Crete, Greece, May 22-27, 2005.
5. Annual Meeting and Exposition of Controlled Release Society (Forty-Four Sessions), Vienna, Austria, July 22-26, 2006.
6. A Celebration of Excellence in Scientific and Engineering Achievement on the Occasion of Nicholas Peppas' 60th Birthday (Four Sessions), Austin, Texas, August 8, 2008.
7. Third Aegean Conference on Tissue Engineering (Twelve Sessions), Rhodes, Greece, September 21-26, 2008.

Organizer of Topical Conferences

1. "Biomaterials, Carriers for Drug Delivery, and Scaffolds for Tissue Engineering" (Thirteen Sessions), Annual AIChE Meeting, Los Angeles, California, November 17-19, 1997.

Organizer of Symposia

1. "Tissue Engineering" (Two Sessions), 11th Annual HSEMB Conference, Houston, Texas, February 11, 1993.
2. "Preparation and Physicochemical Characterization of Hydrogels" (Four Sessions), National ACS Meeting, Denver, Colorado, March 31 - April 1, 1993.
3. "Biomaterials for Drug and Cell Delivery" (Five Sessions), MRS Fall Meeting, Boston, Massachusetts, November 29 - December 1, 1993.
4. "First International Congress on Cellular Therapy & Tissue Engineering" (Six Sessions), BioEast '95, Washington, D.C., January 9-10, 1995.
5. "Polymers in Medicine and Pharmacy" (Six Sessions), MRS Spring Meeting, San Francisco, California, April 17-19, 1995.
6. "Cells at Interfaces" (Four Sessions), National ACS Meeting, San Francisco, California, April 16-17, 1997.
7. "Biomaterials Regulating Cell Function and Tissue Development" (Three Sessions), MRS Spring Meeting, San Francisco, California, April 13-14, 1998.
8. "ACS Award in Polymer Chemistry Honoring Robert Langer: Synthesis and Characterization of Polymers for Biomaterials and Drug Delivery Carriers" (Two Sessions), National ACS Meeting, Anaheim, California, March 22, 1999.
9. "Frontiers of Materials Research" (Four Sessions), MRS Fall Meeting, Boston, Massachusetts, November 27 - December 1, 2000.
10. "Tissue Engineering" (Thirteen Sessions), Annual BMES Fall Meeting, Durham, North Carolina, October 4-7, 2001.

11/10/08

11. "Molecular, Cellular and Tissue Engineering" (Four Sessions), 25th Annual HSEMB Conference, Houston, Texas, February 8, 2008.

Organizer of Workshops

1. "Tissue Engineering" (Two Sessions), 5th World Biomaterials Congress, Toronto, Canada, May 29, 1996.
2. "Bioartificial Tissues," ASME Summer Bioengineering Conference, Sunriver, Oregon, June 14, 1997.
3. "Biodegradable Polymers - From Monomer to the Clinic," 6th World Biomaterials Congress, Kamuela, Hawaii, May 16, 2000.
4. "Tissue Engineering: The Essential Elements," 29th Annual Meeting of the Society For Biomaterials, Reno, Nevada, April 30, 2003.
5. "Nanobiomaterials Applications in Orthopaedics," 52nd Annual Meeting of the Orthopaedic Research Society, Chicago, Illinois, March 20, 2006.

Chair of Sessions

1. "Biomaterials for Organ Regeneration," Annual AIChE Meeting, Los Angeles, California, November 18, 1991.
2. "Cell-Based Therapies and Artificial Organs," Annual AIChE Meeting, Miami Beach, Florida, November 4, 1992.
3. "Tissue Engineering I: Cell Adhesion," 11th Annual HSEMB Conference, Houston, Texas, February 11, 1993.
4. "Tissue Engineering II: Tissue Replacement and Remodeling," 11th Annual HSEMB Conference, Houston, Texas, February 11, 1993.
5. "Preparation and Physicochemical Characterization of Hydrogels: Structure," National ACS Meeting, Denver, Colorado, March 31, 1993.
6. "Preparation and Physicochemical Characterization of Hydrogels: Structure and Properties," National ACS Meeting, Denver, Colorado, April 1, 1993.
7. "Preparation and Physicochemical Characterization of Hydrogels: Structure and Applications," National ACS Meeting, Denver, Colorado, April 1, 1993.
8. "Biomaterials Processing," The Monte Verità Conference 1993 on Biocompatible Materials Systems, Ascona, Switzerland, October 12, 1993.
9. "Biomaterials Posters," Annual AIChE Meeting, St. Louis, Missouri, November 8, 1993.
10. "Biomaterials for Repair or Replacement of Tissues," Annual AIChE Meeting, St. Louis, Missouri, November 8, 1993.
11. "Tissue Scaffolding and Regeneration," MRS Fall Meeting, Boston, Massachusetts, November 29, 1993.
12. "Receptor-Mediated Cell Adhesion, Cell-Biomaterial Interactions, and Cell Encapsulation," MRS Fall Meeting, Boston, Massachusetts, November 30, 1993.
13. "Biomaterials Characterization and Orthopedic Biomaterials," MRS Fall Meeting, Boston, Massachusetts, December 1, 1993.
14. "Biomaterials," 12th Annual HSEMB Conference, Houston, Texas, February 10, 1994.
15. "Tissue Engineering," 12th Annual HSEMB Conference, Houston, Texas, February 11, 1994.

11/10/08

16. "Artificial Organs," 20th Annual Society For Biomaterials Meeting, Boston, Massachusetts, April 9, 1994.
17. "Cell Transplantation to Engineer Organs," Annual BMES Fall Meeting, Tempe, Arizona, October 16, 1994.
18. "Cell and Tissue Interfaces with Biomaterials," Annual AIChE Meeting, San Francisco, California, November 15, 1994.
19. "Cellular Engineering I," 13th Annual HSEMB Conference, Houston, Texas, February 16, 1995.
20. "Hybrid Artificial Organs," 21st Annual Society For Biomaterials Meeting, San Francisco, California, March 20, 1995.
21. "Polymers for Orthopaedic Applications," MRS Spring Meeting, San Francisco, California, April 17, 1995.
22. "Polymers for Tissue Engineering," MRS Spring Meeting, San Francisco, California, April 18, 1995.
23. "Cell and Tissue Engineering - Biopolymer Cell Supports," ASME Summer Bioengineering Conference, Beaver Creek, Colorado, June 29, 1995.
24. "Allograft-, Autograft- and Xenograft-Based Matrices," International Business Communications Conference on Tissue Engineering and Repair, Washington, D.C., August 9, 1995.
25. "Cellular and Tissue Engineering - Hybrid Artificial Organs," Annual BMES Fall Meeting, Boston, Massachusetts, October 8, 1995.
26. "Mammalian Cell Encapsulation," Annual AIChE Meeting, Miami Beach, Florida, November 16, 1995.
27. "Biomaterials," 14th Annual HSEMB Conference, Houston, Texas, February 8, 1996.
28. "Tissue Engineering III," 5th World Biomaterials Congress, Toronto, Canada, June 2, 1996.
29. "Tissue Engineering," 5th World Congress of Chemical Engineering, San Diego, California, July 16, 1996.
30. "Hydrogels and Extracellular Matrix Gels," Annual AIChE Meeting, Chicago, Illinois, November 15, 1996.
31. "Material Sciences," Inaugural TES Meeting, Orlando, Florida, December 14, 1996.
32. "Cellular Engineering II: Smooth Muscle Cells," 15th Annual HSEMB Conference, Houston, Texas, February 14, 1997.
33. "Novel Polymers and Peptide-Incorporated Polymers," National ACS Meeting, San Francisco, California, April 17, 1997.
34. "Drug Delivery," 23rd Annual Society For Biomaterials Meeting, New Orleans, Louisiana, May 3, 1997.
35. "Fabrication Methods and Mechanical Properties," ASME Summer Bioengineering Conference, Sunriver, Oregon, June 14, 1997.
36. "Tissue Engineering," 1st Smith & Nephew International Symposium on Advances in Tissue Engineering and Biomaterials, York, England, July 22, 1997.
37. "Materials and Fabrication Methods for Tissue Engineering Scaffolds," Annual AIChE Meeting, Los Angeles, California, November 17, 1997.
38. "Biomaterials," Annual AIChE Meeting, Los Angeles, California, November 18, 1997.
39. "Tissue Engineering #1," 17th Southern Biomedical Engineering Conference, San Antonio, Texas, February 7, 1998.

11/10/08

40. "Biomaterials in Tissue Engineering," MRS Spring Meeting, San Francisco, California, April 13, 1998.
41. "New Developments in Cartilage, Skin and Bone Engineering," 3rd International Business Communications Industry Symposium on Advancements in Tissue Engineering, Boston, Massachusetts, June 8, 1998.
42. "Tissue Engineering II," 25th International Symposium on Controlled Release of Bioactive Materials, Las Vegas, Nevada, June 23, 1998.
43. "Biomaterial Surface Interactions," Annual AIChE Meeting, Miami Beach, Florida, November 17, 1998.
44. "ACS Award in Polymer Chemistry Honoring Robert Langer: Synthesis and Characterization of Polymers for Biomaterials and Drug Delivery Carriers," National ACS Meeting, Anaheim, California, March 22, 1999.
45. "Polymer Scaffolding for Tissue Engineering Symposium I," 25th Annual Meeting of the Society For Biomaterials, Providence, Rhode Island, April 29, 1999.
46. "Tissue Engineering," 4th Asia-Pacific Conference on Medical and Biological Engineering, Seoul, Korea, September 13, 1999.
47. "Biomaterials II," 4th Asia-Pacific Conference on Medical and Biological Engineering, Seoul, Korea, September 13, 1999.
48. "Targeting Pharmacologic Agents to Sites of Early Lesions," 2000 Research Initiatives Conference in Vascular Disease on the Biology of Vascular Interventions-Minimally Invasive Approaches to Vascular Disease, Bethesda, Maryland, February 18, 2000.
49. "Matrices for Mineralized Tissue Engineering," 6th World Biomaterials Congress, Kamuela, Hawaii, May 19, 2000.
50. "Biomaterials," 19th Annual HSEMB Conference, Houston, Texas, February 9, 2001.
51. "Future Prospects of Biomaterials III," 10th International Symposium on Recent Advances in Drug Delivery Systems, Salt Lake City, Utah, February 22, 2001.
52. "Scaffolding Materials for Bone Tissue Engineering Symposium II," 27th Annual Meeting of the Society For Biomaterials, Saint Paul, Minnesota, April 29, 2001.
53. "Orthopedic Materials," Annual BMES Fall Meeting, Durham, North Carolina, October 5, 2001.
54. "Gene Delivery," American Association of Pharmaceutical Scientists Workshop on Critical Issues in the Design and Applications of Polymeric Biomaterials in Drug Delivery, Arlington, Virginia, February 28, 2002.
55. "New Challenges for Biodegradable Polymers in Substitution and Regeneration Medicine II," 28th Annual Meeting of the Society For Biomaterials, Tampa, Florida, April 26, 2002.
56. "Scaffolds, Carriers, and Other Delivery Vehicles," Aegean Conference on Tissue Engineering Science, Mykonos, Greece, May 21, 2002.
57. "Delivery Systems for BMPs," 4th International Conference on Bone Morphogenetic Proteins, Sacramento, California, October 19, 2002.
58. "Growing the Tissue Engineering Industry," 2nd EMBS-BMES Joint Conference, Houston, Texas, October 23, 2002.
59. "Tissue Engineering," Pittsburgh Bone Symposium 2003, Pittsburgh, Pennsylvania, August 22, 2003.
60. "Scaffolds," 6th Annual International Conference and Exposition of Tissue Engineering Society International, Orlando, Florida, December 12, 2003.

11/10/08

61. "Advances in Biomaterials, Bionanotechnology, Biomimetic Systems and Tissue Engineering: Tutorial Session II," Annual AIChE Meeting, Austin, Texas, November 10, 2004.
62. "Engineering Complex Tissues – Vascularization, Tissue Interfaces, Gradients," Tissue Engineering: The Next Generation Workshop, Cambridge, Massachusetts, May 3, 2005.
63. "Bioreactor and Processing Technologies," 2nd Aegean Conference on Tissue Engineering, Crete, Greece, May 24, 2005.
64. "Vascular and Tissue Engineering Systems," 32nd International Symposium on Controlled Release of Bioactive Materials, Miami Beach, Florida, June 20, 2005.
65. "Tissue Engineering 2," 3rd International Conference on Materials for Advanced Technologies, Singapore, July 8, 2005.
66. "Tissue Engineering 3," 3rd International Conference on Materials for Advanced Technologies, Singapore, July 8, 2005.
67. "Converging Technologies and Their Impact on Medical Devices," Texas/United Kingdom Symposium on Medicine and Medical Devices, Rice University, Houston, Texas, October 10, 2005.
68. "Keynote Speech Session-1," 8th Annual Meeting of Tissue Engineering Society International, Shanghai, China, October 22, 2005.
69. "Scaffolds for Tissue Engineering," 1st Marie Curie Cutting Edge InVENTS Conference on New Developments on Polymers for Tissue Engineering, Replacement and Regeneration, Madeira, Portugal, June 2, 2006.
70. "Tissue Engineering," 33rd Annual Meeting and Exposition of Controlled Release Society, Vienna, Austria, July 24, 2006.
71. "Tissue Engineered Products for Clinical Applications I," 32nd Annual Meeting of the Society For Biomaterials, Chicago, Illinois, April 19, 2007.
72. "Cell Integration into Natural and Synthetic Matrices," Tissue Engineering and Regenerate Medicine International Society – North America Conference and Exposition, Toronto, Canada, June 14, 2007.
73. "Molecular, Cellular and Tissue Engineering I: Accomplishments and Perspectives," 25th Annual HSEMB Conference, Houston, Texas, February 8, 2008.
74. "Molecular, Cellular and Tissue Engineering II: Bioactive Molecules and Drug Delivery Systems," 25th Annual HSEMB Conference, Houston, Texas, February 8, 2008.
75. "Molecular, Cellular and Tissue Engineering III: Biomimetic Materials and Scaffolds," 25th Annual HSEMB Conference, Houston, Texas, February 8, 2008.
76. "Molecular, Cellular and Tissue Engineering IV: Cell-Based Strategies," 25th Annual HSEMB Conference, Houston, Texas, February 8, 2008.
77. "Biomaterials for Tissue Engineering and Regenerative Medicine," 8th World Biomaterials Congress, Amsterdam, The Netherlands, May 31, 2008.
78. "Plenary 4," 8th World Biomaterials Congress, Amsterdam, The Netherlands, June 1, 2008.
79. "Growth Factors and Soluble Mediators 2," 3rd Aegean Conference on Tissue Engineering, Rhodes, Greece, September 24, 2008.

Reviewer

Reviewer of Research Proposals:

American Chemical Society - Petroleum Research Fund

11/10/08

Cornell University - Morgan Seed Grant Program for Collaborative Multidisciplinary
Research in Tissue Engineering

Department of Defense

Dunhill Medical Trust

Louisiana Board of Regents

Massachusetts Institute of Technology - Sea Grant College Program

National Institutes of Health

National Science Foundation

National Sciences and Engineering Research Council of Canada

National University of Singapore - Faculty of Science

North Carolina Biotechnology Center

Pittsburgh Tissue Engineering Initiative

Swiss National Science Foundation

United States-Israel Binational Science Foundation

University of Maryland - Sea Grant College Program

University of Michigan - Center for Biomedical Engineering Research

University of Michigan - Center for Bio restoration of Oral Health

The University of Texas Health Science Center at San Antonio - The Aging Research and
Education Center

The Whitaker Foundation

Reviewer of Book Proposals:

John Wiley & Sons, Inc.

Reviewer of Manuscripts:

AIChE Journal

Applied Biomaterials

Biochemical Pharmacology

Bioconjugate Chemistry

Biomacromolecules

Biomaterials

BioTechniques

Biotechnology and Bioengineering

Calcified Tissue International

Cells and Materials

Cell Transplantation

Chemical Engineering Science

Chemical Reviews

Chemistry of Materials

Colloids and Surfaces

Computational Polymer Science

Critical Reviews in Oral Biology & Medicine

Current Eye Research

Gene Therapy

Human Gene Therapy

IMA Journal of Mathematics Applied in Medicine and Biology

International Journal of Nanomedicine

International Journal of Pharmaceutics

11/10/08

Journal of Applied Physiology
 Journal of Applied Polymer Science
 Journal of Biological Chemistry
 Journal of Biomaterials Science, Polymer Edition
 Journal of Biomedical Materials Research
 Journal of Biotechnology
 Journal of Colloid and Interface Science
 Journal of Controlled Release
 Journal of Dental Research
 Journal of Investigative Dermatology
 Journal of Membrane Science
 Journal of Orthopaedic Research
 Journal of Pharmaceutical Sciences
 Journal of Physical Chemistry
 Journal of Polymer Science, Part A: Polymer Chemistry
 Journal of Polymer Science, Part B: Polymer Physics
 Journal of Theoretical Biology
 Kirk-Othmer Encyclopedia of Chemical Technology
 Langmuir
 Macromolecules
 Nature Biotechnology
 Nature Medicine
 Pharmaceutical Research
 Polymer
 Polymer Engineering and Science
 Polymer International
 Proceedings of the National Academy of Sciences USA
 Public Library of Science Medicine
 Science
 Stem Cells
 Surface Science
 Trends in Biotechnology
 Trends in Molecular Medicine
 Reviewer of Books:
 European Journal of Pharmaceutics and Biopharmaceutics
 Journal of Controlled Release
 Polymer News

Organizer of Continuing-Education Courses

1. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 2-6, 1993.
2. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 1-5, 1994.
3. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 1-5, 1995.

11/10/08

4. "Tissue Engineering: Current Challenges in Discovery, Development and Review," Sponsored by the US Food and Drug Administration, Rockville, Maryland, February 20, March 12, 26, April 2, 9, and May 21, 1996.
5. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 5-9, 1996.
6. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," American Society of Plastic Surgeons Annual Scientific Meeting, Dallas, Texas, November 12, 1996.
7. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 11-15, 1997.
8. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," American Society of Plastic Surgeons Annual Scientific Meeting, San Francisco, California, September 23, 1997.
9. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 17-21, 1998.
10. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," International Confederation for Plastic, Reconstructive and Aesthetic Surgery Congress, San Francisco, California, June 30, 1999.
11. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 22-26, 1999.
12. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," American Society of Plastic Surgeons Annual Scientific Meeting, New Orleans, Louisiana, October 26, 1999.
13. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 13-17, 2000.
14. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," American Society of Plastic Surgeons Annual Scientific Meeting, Los Angeles, California, October 17, 2000.
15. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 15-19, 2001.
16. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 14-17, 2002.
17. "Introduction to Tissue Engineering: A Glimpse into the Future," American Society of Plastic Surgeons Annual Scientific Meeting, San Antonio, Texas, November 4, 2002.
18. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 13-16, 2003.
19. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 11-14, 2004.
20. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 10-13, 2005.
21. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 16-19, 2006.
22. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 15-18, 2007.
23. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 13-16, 2008.

Lecturer of Continuing-Education Courses

11/10/08

1. "Polymer Science and Technology," Sponsored by Chemical Process Engineering Research Institute, Thessaloniki, Greece, June 1991.
2. "Frontiers in Polymer Science: Polymer Preparation, Properties and Structure," Sponsored by Purdue University, Indianapolis, Indiana, June 22-26, 1992.
3. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 2-6, 1993.
4. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 1-5, 1994.
5. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 1-5, 1995.
6. "Tissue Engineering: Current Challenges in Discovery, Development and Review," Sponsored by the US Food and Drug Administration, Rockville, Maryland, March 26, 1996.
7. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 5-9, 1996.
8. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," American Society of Plastic Surgeons Annual Scientific Meeting, Dallas, Texas, November 12, 1996.
9. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 11-15, 1997.
10. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," American Society of Plastic Surgeons Annual Scientific Meeting, San Francisco, California, September 23, 1997.
11. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 17-21, 1998.
12. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," International Confederation for Plastic, Reconstructive and Aesthetic Surgery Congress, San Francisco, California, June 30, 1999.
13. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 22-26, 1999.
14. "Biodegradable Polymers for Tissue Engineering," 4th Asia-Pacific Conference on Medical and Biological Engineering, Seoul, Korea, September 12, 1999.
15. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," American Society of Plastic Surgeons Annual Scientific Meeting, New Orleans, Louisiana, October 26, 1999.
16. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 13-17, 2000.
17. "Tissue Engineering: A Glimpse into the Future of Plastic Surgery," American Society of Plastic Surgeons Annual Scientific Meeting, Los Angeles, California, October 17, 2000.
18. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 15-19, 2001.
19. "Materials for Tissue Engineering," Annual BMES Fall Meeting, Durham, North Carolina, October 4, 2001.
20. "Cell-Based Therapies and Tissue Engineering," Sponsored by Case Western Reserve University, Cleveland, Ohio, May 29-June 1, 2002.
21. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 14-17, 2002.

11/10/08

22. "Introduction to Tissue Engineering: A Glimpse into the Future," American Society of Plastic Surgeons Annual Scientific Meeting, San Antonio, Texas, November 4, 2002.
23. "Cell-Based Therapies and Tissue Engineering," Sponsored by Case Western Reserve University, Cleveland, Ohio, May 27-31, 2003.
24. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 13-16, 2003.
25. "Current Progress in Tissue Engineering," Sponsored by Harvard Medical School, Boston, Massachusetts, October 2-3, 2003.
26. "Cell-Based Therapies and Tissue Engineering," Sponsored by Case Western Reserve University, Cleveland, Ohio, May 17-21, 2004.
27. "Summer School on Emerging Technologies in Biomedicine," Sponsored by the University of Patras, Patras, Greece, June 20-25, 2004.
28. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 11-14, 2004.
29. "Cell-Based Therapies and Tissue Engineering," Sponsored by Case Western Reserve University, Cleveland, Ohio, May 31-June 3, 2005.
30. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 10-13, 2005.
31. "Cell-Based Therapies and Tissue Engineering," Sponsored by Case Western Reserve University, Cleveland, Ohio, May 22-26, 2006.
32. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 16-19, 2006.
33. "Cell-Based Therapies and Tissue Engineering," Sponsored by Case Western Reserve University, Cleveland, Ohio, May 21-25, 2007.
34. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 15-18, 2007.
35. "Cell-Based Therapies and Tissue Engineering," Sponsored by Case Western Reserve University, Cleveland, Ohio, May 19-23, 2008.
36. "Advances in Tissue Engineering," Sponsored by Rice University, Houston, Texas, August 13-16, 2008.

Research Grants (Total Costs)

Principal Investigator

1. T.N. Law Professorship in Bioengineering (1992-96)
\$ 150,000
2. Rice University - Biomedical Research Support Grant (1992-93)
"Tissue Engineering by Cell Transplantation"
\$ 4,800
3. National Science Foundation - Research Equipment Grant (1992-93)
"Gel Permeation Chromatography System for Bioengineering Research"
\$ 26,567 (with Drs. J.V. Shanks and K. Zygorakis)

11/10/08

4. Rice University - Biomedical Research Support Grant (1992-93)
"UV/VIS System for Research in Biosciences and Bioengineering"
\$ 3,100 (with Drs. J.V. Shanks and K. Zygorakis)
5. Orthopedic Research and Education Foundation (1993-95)
"A Temporary Replacement for Trabecular Bone: Biodegradable Particulate Composites with Osteoblast Transplantation for Orthopaedic Applications"
\$ 97,277 (with Dr. M.J. Yaszemski)
6. Texas Biotechnology Corporation, Houston, Texas (1993-95)
"Bioresorbable Polymer Delivery of Antisense Oligonucleotides"
\$ 53,068
7. American Cyanamid Company, Princeton, New Jersey (1994-95)
"Controlled Release Systems for Bioactive Macromolecules"
\$ 5,000
8. The Whitaker Foundation (1994-97)
"Polymeric Delivery Systems for Antisense Oligonucleotides"
\$ 179,617
9. Johnson & Johnson Medical (1994-95)
"Biodegradable Polymer Foams for Dermal Tissue Repair"
\$ 18,834
10. C.A. Garcia Fund for Eye Research (1995-96)
"Retinal Pigment Epithelium Regeneration"
\$ 19,503
11. National Retinitis Pigmentosa Foundation (1995-98)
"Mechanical and Immunological Phenomena Affecting Survival of Transplanted Retinal Pigment Epithelial Cells"
\$ 113,208 (with Drs. D. Lahiri-Munir and C.A. Garcia)
12. National Aeronautics and Space Administration (1996-2001)
"Mechanical Load Effects on Bone Formation"
\$ 424,690 (with Dr. P. Whitson)
13. National Institutes of Health - FIRST Award (1996-2001)
"Bone Regeneration by Osteoblast Transplantation"
\$ 523,250
14. National Aeronautics and Space Administration (1996-97)
"Analysis of Mechanical Loading Effects on Bone Formation and Remodeling"
\$ 22,000

11/10/08

15. National Institutes of Health (1996-2001)
"Injectable Biomaterials for Bone Tissue Engineering"
\$ 729,637
16. Defense Advanced Research Projects Agency (1997-99)
"Biomimetic Materials for Pathogen Neutralization"
\$ 779,612
17. National Institutes of Health (1998-2003)
"In Situ Polymerizable Gels for Dental Tissue Engineering"
\$ 1,379,306
18. Chrysalis BioTechnology, Galveston, Texas (1998-99)
"Microparticle Biodegradable Polymeric Delivery Systems for Bioactive Molecules"
\$ 17,940
19. Molecular Geodesics, Boston, Massachusetts (1999-2000)
"Biomimetic Materials for Pathogen Neutralization"
\$ 12,400
20. National Institutes of Health (1999-2004)
"Strength and Resorption of Biodegradable Skull Implants"
\$ 511,435
21. Toray Industries, Shiga, Japan (2000-02)
"Development of Biocompatible Materials"
\$ 20,000
22. Chrysalis BioTechnology, Galveston, Texas (2001-02)
"Controlled Release Systems for Bioactive Molecules"
\$ 30,000
23. Desmogen, Bellaire, Texas (2001-02)
"Biomaterials Development for Vertebroplasty"
\$ 100,000
24. National Science Foundation (2001-06)
"Nanocomposites for Bone Replacement"
\$ 260,980
25. Advanced Technology Program of the State of Texas (2002-03)
"Novel Scaffold Design and Evaluation Technique for Engineering Bone Replacement Tissue"
\$ 187,500 (with Dr. M.A.K. Liebschner)
26. National Institutes of Health (2002-07)

11/10/08

- "Bone Regeneration by Osteoblast Transplantation"
\$ 1,163,237
- 27. Bausch & Lomb, Rochester, New York (2002-03)
"Injectable Ocular Drug Delivery Systems"
\$ 100,053
- 28. National Institutes of Health (2003-08)
"Injectable Cellular Composites for Cartilage Engineering"
\$ 1,681,524
- 29. Bausch & Lomb, Rochester, New York (2003-04)
"Injectable Ocular Drug Delivery Systems"
\$ 100,000
- 30. National Institutes of Health (2004-09)
"Promotion of Alveolar Socket Healing with Biopolymers"
\$ 1,528,360
- 31. Bausch & Lomb, Rochester, New York (2004-05)
"Ocular Drug Delivery Systems"
\$ 100,000
- 32. National Institutes of Health (2005-10)
"Tissue Engineering of Hematopoietic Bone"
\$ 240,503
- 33. Bausch & Lomb, Rochester, New York (2005)
"Ocular Drug Delivery Systems"
\$ 30,000
- 34. Dan L. Duncan Cancer Center, Houston, Texas (2006-07)
"Maintenance of Ovarian Reserve after Cancer Chemotherapy"
\$ 80,000
- 35. Rice University - International Collaboration Travel Fund (2007)
"Global Approaches in Tissue Engineering"
\$ 9,800
- 36. National Institutes of Health (2008-13)
"In Situ Hardening Cellular Constructs for Craniofacial Bone Regeneration"
\$ 1,648,295
- 37. Department of Defense (2008-13)
"Antibiotic Releasing Space Maintainer and Prefabricated Vascularized Bone Flap"
\$ 1,998,009

11/10/08

38. Rice University - International Collaboration Travel Fund (2008)
"Manufacturing and Scale-Up Towards Clinical Treatments of Craniofacial Trauma: A Collaborative Effort Between Rice University and the National Tissue Engineering Center of China"
\$ 7,000
39. SpinalCyte, Houston, Texas (2008-2010)
"Repair of Cartilage Using an In Vitro Bioreactor"
\$ 300,000
40. Celthera, Hopkinton, Massachusetts (2008-2009)
"Bone Regeneration Using Scaffold-Reinforced Hydrogel/Whole Marrow Constructs"
\$ 65,000
41. National Institutes of Health (2008-10)
"Regulated Osteochondrogenesis of Human Mesenchymal Stem Cells Using Gene Delivery"
\$ 360,272
42. Defense Advanced Research Projects Agency (2008-10)
"BioNanoScaffolds (BNS) for Post-Traumatic Osteoregeneration"
\$ 1,200,000

Co-Principal Investigator

1. The Whitaker Foundation - Biomedical Engineering Special Opportunity Award (1995-98)
"Frontiers in Cellular and Tissue Engineering"
\$ 750,000 (Dr. L.V. McIntire, P.I.)
2. National Science Foundation (1995-98)
"Light Scattering Detector for Polymer Research"
\$ 20,600 (Part of "Radical Reactions of the Azo and Azoxy Groups," \$ 406,000, Dr. P.S. Engel, P.I.)
3. University of Texas M.D. Anderson Cancer Center - Physicians Referral Service (1995-96)
"Tissue Engineered Bone Flaps in Sheep"
\$ 31,295 (Dr. M.J. Miller, P.I.)
4. University of Texas M.D. Anderson Cancer Center - Physicians Referral Service (1995-96)
"In Vivo Evaluation of Recombinant Human Bone Morphogenetic Protein-2 as a Bone Graft Substitute for Cavitary Bone Defects"
\$ 43,170 (Dr. A.W. Yasko, P.I.)
5. The Whitaker Foundation - Biomedical Engineering Development Award (1996-2001)
"New Frontiers in Biomedical Engineering Education and Research"

11/10/08

\$ 5,000,000 (Dr. L.V. McIntire, P.I.)

6. Department of Defense (1996-97)
"Solid State NMR for the Characterization of Functional Materials"
\$ 200,000 (Dr. A.R. Barron, P.I.)
7. The Whitaker Foundation - Biomedical Engineering Leadership Award (1998-2003)
\$ 6,000,000 (Dr. L.V. McIntire, P.I.)
8. National Institutes of Health - Biotechnology Research Training Grant (2001-06)
\$ 1,506,761 (Dr. L.V. McIntire, P.I.)
9. National Science Foundation - Integrative Graduate Education and Research Training
Grant in Cellular Engineering (2001-06)
\$ 2,620,649 (Dr. L.V. McIntire, P.I.)
10. National Science Foundation – Nanoscale Science and Engineering Center (2001-06)
"Center for Nanoscience in Biological and Environmental Engineering"
\$ 10,539,998 (Dr. R.E. Smalley, P.I.)

Students Supervised

Postdoctoral Research

Rice University:

Markus S. Widmer, Ph.D. (ETH Zürich, 1995), 1995-1997
 Julia E. Babensee, Ph.D. (University of Toronto, 1996), 1996-1999
 Raman V. Bahulekar, Ph.D. (University of Poona, 1991), 1997-1999
 Aaron S. Goldstein, Ph.D. (Carnegie Mellon University, 1997), 1997-1999
 Guizhen Liu, M.D. (University of Zürich, 1993), 1997-1999
 Qing Liu, Ph.D. (Leiden University, 1997), 1997-1999
 Zewen Liu, Ph.D. (University of Tulane, 1996), 1997-1998
 Guoming Zhu, M.D. (Shanghai Medical University, 1985), 1997-1998
 Shulin He, Ph.D. (University of Gent, 1993), 1998-1999
 Seongbong Jo, Ph.D. (Purdue University, 1998), 1998-2000, 2002-2003
 Georgios Stamatas, Ph.D. (Rice University, 1998), 1998
 Lichun Lu, Ph.D. (Rice University, 1999), 1999-2000
 William T. Godbey, Ph.D. (Rice University, 1999), 1999-2000
 Vassilios I. Sikavitsas, Ph.D. (State University of New York at Buffalo, 1999), 1999-2002
 Joerg Tessmar, Ph.D. (University of Regensburg, 2002), 2002-2004
 German Research Foundation Postdoctoral Fellowship, 2002-2004
 Hiroki Ueda, Ph.D. (Kyoto University, 2001), 2003-2004
 Japanese Science Foundation Postdoctoral Fellowship, 2003-2004
 Johnna S. Temenoff, Ph.D. (Rice University, 2003), 2003-2005
 National Institutes of Health Craniofacial-Oral Biology Program Trainee, 2004-2005
 Michael C. Hacker, Ph.D. (University of Regensburg, 2004), 2004-2007

11/10/08

German Research Foundation Postdoctoral Fellowship, 2005-2007
Upma Sharma, Ph.D. (Princeton University, 2005), 2005-2006
First Prize, Keck Center Annual Research Conference Poster Contest, Gulf Coast Consortium, 2005
National Institutes of Health Nanobiology Program Trainee, 2005-2006
Elizabeth Christenson, Ph.D. (Case Western Reserve University, 2005), 2005-2007
National Institutes of Health Craniofacial-Oral Biology Program Trainee, 2005-2007
Mark Sweigart, Ph.D. (Rice University, 2005), 2005-2006
F. Kurtis Kasper, Ph.D. (Rice University, 2005), 2005-2008
National Institutes of Health Nanobiology Program Trainee, 2007-2008
Balaji Sitharaman, Ph.D. (Rice University, 2005), 2005-2007
Center for Nanoscale Science and Technology Evans Atwell Fellowship, 2005-2007
Theoni K. Georgiou, Ph.D. (University of Cyprus, 2006), 2006-2007
Meng Shi, Ph.D. (University of Toronto, 2008), 2008-present
Milind Singh, Ph.D. (University of Kansas, 2008), 2008-present

Graduate Research

Rice University:

Susan L. Ishaug-Riley, Ph.D., 1992-1996

Graduate Student Award for Outstanding Research, Society For Biomaterials, 1997
Ralph Budd Award for Best Engineering Ph.D. Thesis, Rice University, 1997
Ph.D. Thesis Award: Runner Up, Sigma Xi, Rice University/Texas Medical Center, 1997
Dr. William B. Walsh Award for Excellence in Bioengineering, Advanced Tissue Sciences, 1996
First Prize, Chemical Engineering Graduate Research Symposium, Rice University, 1996
First Prize, Chemical Engineering Graduate Research Poster Contest, Rice University, 1996
Poster Award: Honorable Mention, Houston Society for Engineering in Medicine and Biology, 1996
Second Prize, Chemical Engineering Graduate Research Symposium, Rice University, 1995

Robert C. Thomson, Ph.D., 1992-1997

Robert L. Cleek, Ph.D., 1993-1997

Selected Excellence Paper, Society For Biomaterials, 1997
Intermedics Best Poster Award, Houston Society for Engineering in Medicine and Biology, 1995

Anna C. Jen, M.S., 1993-1997

NASA Graduate Student Researchers Program Trainee, 1996-1997
National Institutes of Health Biotechnology Program Trainee, 1994-1996

Laura J. Suggs, Ph.D., 1993-1998

Excellence in Science Dissertation Award for Best Ph.D. Thesis, Sigma Xi, Rice University/ Texas Medical Center, 1998
Graduate Student Award for Best Paper, Southern Biomedical Engineering Conference, 1998
Hershel M. Rich Invention Award, Rice University, 1997

11/10/08

National Institutes of Health Biotechnology Program Trainee, 1995-1997
M. Conley Wake, M.S., 1993-1997
Lodieska Stockbridge Vaughan Fellowship, Rice University, 1996
Third Prize, Chemical Engineering Graduate Research Symposium, Rice University, 1996
Distinguished Contribution, BFGoodrich Collegiate Inventors Program, 1995
National Science Foundation Graduate Fellowship, 1993-1996
Lichun Lu, Ph.D., 1994-1999
Susan J. Peter, Ph.D., 1994-1998
Graduate Student Award for Outstanding Research, Society For Biomaterials, 1998
Graduate Student Award Finalist, Materials Research Society Spring Meeting, 1998
National Institutes of Health Biotechnology Program Trainee, 1996-1998
Richard G. Payne, Ph.D., 1995-2001
Ralph Budd Award for Best Engineering Ph.D. Thesis, Rice University, 2002
First Prize, Chemical Engineering Graduate Research Poster Contest, Rice University, 1999
National Institutes of Health Biotechnology Program Trainee, 1997-1999
Hershel M. Rich Invention Award, Rice University, 1997
Hershel M. Rich Invention Award, Rice University, 1995
Esfandiar Behraves, Ph.D., 1997-2002
William T. Godbey, Ph.D., 1997-1999
Graduate/Postdoc Award on Innovative Aspects of Controlled Drug Release, Controlled Release Society-Capsugel, 2000
National Science Foundation Graduate Fellowship, 1997-1999
Albert K. Shung, M.S., 1997-2002
Gregory N. Bancroft, Ph.D., 1998-2002
Best Poster Award, Baylor College of Medicine M.D./Ph.D. Symposium, 2001
Best Paper Award, Texas Medical Scientist Training Program Conference, 2000
Transco Scholarship, 1998-2002
John P. Fisher, Ph.D., 1998-2002
National Science Foundation Center for Biological and Environmental Nanotechnology Trainee, 2001-2003
Best Poster Award, Materials Research Society Fall Meeting, 2000
Jeremy S. Blum, Ph.D., 1998-2003
National Science Foundation Integrative Graduate Education and Research Program Trainee, 2001-2003
Heungsoo Shin, Ph.D., 1998-2003
Graduate Student Award for Outstanding Research, Society For Biomaterials, 2002
Johnna S. Temenoff, Ph.D., 1998-2003
Ralph Budd Award for Best Engineering Ph.D. Thesis, Rice University, 2004
Whitaker Foundation Graduate Fellowship, 1998-2003
Mark D. Timmer, Ph.D., 1998-2003
National Science and Engineering Research Council Fellowship, 2000-2003
National Institutes of Health Biotechnology Program Trainee, 1999-2000
Jeffrey E.-K. Chen, M.S., 1999-2002
Elizabeth L. Hedberg, Ph.D., 1998-2004

11/10/08

National Science Foundation Center for Biological and Environmental Nanotechnology Trainee, 2003-2004
 Tissue Engineering Special Interest Group Student Award, Society For Biomaterials, 2002
 National Institutes of Health Biotechnology Program Trainee, 2001-2002
 National Institutes of Health Biotechnology Program Trainee, 1999-2000
 Heidi L. Holtorf, Ph.D., 1999-2004
 Graduate Student Award for Outstanding Research, Society For Biomaterials, 2005
 National Science Foundation Integrative Graduate Education and Research Program Trainee, 2001-2003
 F. Kurtis Kasper, Ph.D., 1999-2005
 Sallyport Award, Association of Rice Alumni, 2006
 National Science Foundation Integrative Graduate Education and Research Program Trainee, 2001-2003
 Manuela E. Gomes, Ph.D., 2001-2004
 Portuguese Foundation for Science and Technology Graduate Fellowship, 2001-2004
 Theresa A. Holland, Ph.D., 2001-2005
 Whitaker Foundation Graduate Fellowship, 2001-2005
 Amit S. Mistry, Ph.D., 2002-2007
 First Prize, National Institutes of Health Biotechnology Graduate Training Program Poster Contest, Rice University, 2004
 National Institutes of Health Biotechnology Program Trainee, 2003-2005
 Zarana S. Patel, Ph.D., 2002-2007
 National Science Foundation Graduate Fellowship, 2003-2006
 Xinfeng Shi, Ph.D., 2002-2007
 Poster Award: Runner Up, Houston Society for Engineering in Medicine and Biology, 2004
 First Prize, Bioengineering Graduate Research Poster Contest, Rice University, 2004
 Hansoo Park, Ph.D., 2003-2007
 Sheila A. Moore, M.S., 2003-2007
 Matthew B. Murphy, Ph.D., 2003-2008
 National Science Foundation Integrative Graduate Education and Research Program Trainee, 2005-2006
 Quynh P. Pham, Ph.D., 2003-2007
 Simon Young, Ph.D., 2003-2008
 Oral Abstract Scientific Presentation Award, Annual Meeting of the American Association of Oral and Maxillofacial Surgeons, 2007
 Oral and Maxillofacial Surgery Foundation Research Fellowship, 2004-2006
 Sue Anne Chew, Ph.D. Candidate, 2004-present
 Xuan Guo, Ph.D. Candidate, 2004-present
 Jehong Liao, Ph.D. Candidate, 2004-present
 Anita Saraf, Ph.D. Candidate, 2004-present
 National Science Foundation Integrative Graduate Education and Research Program Trainee, 2005-2006
 Leda Klouda, Ph.D. Candidate, 2005-present
 Edgar O'Rear Travel Grant, Institute of Biosciences and Bioengineering, Rice University, 2007

11/10/08

Gerondelis Foundation Scholarship, 2007
James D. Kretlow, Ph.D. Candidate, 2005-present
National Institutes of Health Biotechnology Program Trainee, 2006-2008
National Institutes of Health Nanobiology Program Trainee, 2008-present
Andrea Haesslein, M.S., 2006-2007
Richard A. Thibault, Ph.D. Candidate, 2006-present
Ruth L. Kirschstein National Research Service Award, National Institutes of Health, 2008-present
Travel Award, 3rd Aegean Conference on Tissue Engineering, Rhodes, Greece, 2008
Emily L. Burdett, Ph.D. Candidate, 2007-present
National Institutes of Health Biotechnology Program Trainee, 2008-present
Paschalia M. Mountziaris, Ph.D. Candidate, 2007-present
National Institutes of Health Nanobiology Program Trainee, 2008-present

M.I.T.:

Heidi L. Wald, M.S., 1990-1991

Undergraduate Research

Rice University:

M. Conley Wake, 1992-1993
National Science Foundation Graduate Fellowship, 1993
POLYED Award for Outstanding Undergraduate Polymer Research, American Chemical Society, 1993
James S. Waters Creativity Award, Rice University, 1993
Marta A. West, 1992-1993
Undergraduate Scholar Award, Rice University, 1993
Horst A. von Recum, 1993
Matthew D. Allen, 1994-1995
Christine M. Bardsley, 1994
Joel H. Collier, 1994
Susan A. Hoffman, 1994
David Jaber, 1994
Keith Johnson, 1994
Julie L. Morris, 1994-1995
Terri A. Shefelbine, 1994
National Science Foundation Graduate Fellowship, 1995
Coy R. Stine, 1994
Alyssa R. Terk, 1994, 1996
Genevieve M. Crane, 1995-1996
Marshall Fellowship, 1996
National Science Foundation Graduate Fellowship, 1996
Whitaker Foundation Graduate Fellowship, 1996
James S. Waters Creativity Award, Rice University, 1996
John P. McGovern Outstanding Pre-Medical Student Award, Rice University, 1996

11/10/08

First Prize, The Institute of Biosciences and Bioengineering / Biochemistry and Cell Biology Poster Retreat (Undergraduate Seniors Category), Rice University, 1996
 POLYED Award for Outstanding Undergraduate Polymer Research, American Chemical Society, 1995
 Cameron A. Etezadi, 1995-1996
 Puneet K. Gupta, 1995-1997
 Travis W. Hopp, 1995-1997
 Edmund Y.-C. Kao, 1995-1996
 National Science Foundation Graduate Fellowship, 1996
 Joyce L. Almaguer, 1996-1997
 S. David Cho, 1996-1997
 C. Alejandra Garcia, 1996-1998
 Daniel J. Kim, 1996-1998
 James S. Waters Creativity Award, Rice University, 1997
 Poster Award: Runner Up, Houston Society for Engineering in Medicine and Biology, 1997
 Ravi S. Krishnan, 1996-1997
 Valerie A.-L. Liu, 1996-1998
 National Science Foundation Graduate Fellowship, 1998
 Whitaker Foundation Graduate Fellowship, 1998
 Jessica A. Nolley, 1996
 Fulbright Fellowship, 1997
 Saumya A. Sivaram, 1996-1999
 Karen C. Ting, 1996
 Paul Kim, 1997-1998
 Catalina R. Liang, 1997-1998
 Laurie L. Palombo, 1997
 Angela S.-Y. Peng, 1997-1998
 Charlos C. Ward, 1997
 Kimathi S.R. Blackwood, 1998
 Sheila A. Herman, 1998-1999
 Special Award for Originality, Annual Biosciences Undergraduate Poster Session, 1999
 Tiffany M. Juarez, 1998-2000
 Grayson E. Morris, 1998
 National Science Foundation Graduate Fellowship, 1999
 Kavita Nyalakonda, 1998-1999
 Joseph S. McGonigle, 1999-2000
 Mehul N. Tejani, 1999
 Weera Chainakul, 2000
 Theresa A. Holland, 2000-2001
 National Science Foundation Graduate Fellowship, 2001
 Whitaker Foundation Graduate Fellowship, 2001
 National Defense Science and Engineering Fellowship, 2001
 James S. Waters Creativity Award, Rice University, 2001
 Best Poster Award, Materials Research Society Fall Meeting, 2000
 George R. Brown Undergraduate Research Intern, Rice University, 2000

11/10/08

Jerzy Rokicki, 2000-2002
 Century Scholar, 2000-2002
 Robert W. Schroeter, 2000
 R. Adam Horch, 2001-2004
 National Science Foundation Center for Biological and Environmental Nanotechnology
 Trainee, 2002-2004
 Century Scholar, 2001-2003
 Charles K.-J. Shih, 2001-2004
 George R. Brown Undergraduate Research Intern, Rice University, 2002-2003
 National Science Foundation Center for Biological and Environmental Nanotechnology
 Trainee, 2001-2002
 Emily S. Steinbis, 2001-2002
 Second Prize, Rice Undergraduate Research Symposium, Rice University, 2002
 John W. Baker, 2002
 Carla M. Bossano, 2002-2003
 Beth M. Boulden, 2002
 Marc A. Burrell, 2002-2004
 Century Scholar, 2002-2004
 Daniel E. Conway, 2002-2003
 National Science Foundation Graduate Fellowship, 2003
 Néha Datta, 2002-2006
 Distinguished Senior Award, Rice Engineering Alumni Association, 2006
 Outstanding Contributions to Research Bioengineering Award, Rice University, 2006
 James S. Waters Creativity Award, Rice University, 2004
 Century Scholar, 2002-2004
 Julia L. Pergola, 2002-2003
 George R. Brown Undergraduate Research Intern, Rice University, 2003
 Stephanie K. Seidlits, 2002-2003
 Todd T. Tomson, 2002
 Geng Chen, 2003-2004
 Century Scholar, 2003-2004
 Cara R. Rieger, 2003-2004
 Timothy Borden, 2004-2006
 Century Scholar, 2004-2006
 Eric Huang, 2004-2005
 Century Scholar, 2004-2005
 Erin D. Jerkins, 2004-2005
 Patrick P. Spicer, 2004-2006
 Tommy Fu, 2005-2007
 Century Scholar, 2005-2007
 Supriya Hattangadi, 2005-2007
 Century Scholar, 2005-2007
 Brandy Ma, 2005-2006
 Julie M. Mani, 2005-2006
 Salman A. Rahman, 2005-2007
 Marina N. Boleda, 2006-2007

11/10/08

Stacy H. Cheng, 2006-2007
 Roxana R. Daneshjou, 2006-
 Century Scholar, 2006-
 Jennifer L. Holm, 2006-2007
 Wafa Soofi, 2006-2007
 Katherine L. Wu, 2006-2007
 Tiffany Yeh, 2006-2007
 Tiffany J. Siu, 2007
 Laura H. Barg-Walkow, 2007-
 Century Scholar, 2007-
 Brian T. Benjamin, 2007-
 Diane Chen, 2007-
 Century Scholar, 2007-
 Genevieve Lozier, 2007-

M.I.T.:

Amy J. Thorsen, 1990
 Yuan Bao, 1990-1991
 Lisa A. Czerwinka, 1990-1991
 Hui-Lin Lai, 1990-1991
 Georgios Sarakinos, 1990-1991
 Amy M. Whiteman, 1990-1991
 Joseph F. Cotten, 1991
 Susan M. Leite, 1991

Purdue University:

Lyn M. Eshelman, 1986
 Candace J. Chang, 1987
 Daphne M. Williams, 1987

Ph.D. Theses Supervised

1. Susan L. Ishaug-Riley, "Bone Formation by Three-Dimensional Osteoblast Culture in Biodegradable Poly(α -Hydroxy Ester) Scaffolds," Ph.D. Thesis, Department of Chemical Engineering, Rice University, June 1996.
2. Robert C. Thomson, "Biodegradable Polymer Scaffold Fabrication and the Creation of Tissue Engineered Bone," Ph.D. Thesis, Department of Chemical Engineering, Rice University, April 1997.
3. Robert L. Cleek, "Polymeric Delivery of Inhibitors of Smooth Muscle Cell Proliferation," Ph.D. Thesis, Department of Chemical Engineering, Rice University, May 1997.
4. Susan J. Peter, "Injectable, In Situ Polymerizable, Biodegradable Scaffolds Based on Poly(Propylene Fumarate) for Guided Bone Regeneration," Ph.D. Thesis, Department of Chemical Engineering, Rice University, May 1998.
5. Laura J. Suggs, "Development of Poly(Propylene Fumarate-co-Ethylene Glycol): An Injectable, Biodegradable Implant for Cardiovascular Applications," Ph.D. Thesis, Department of Chemical Engineering, Rice University, May 1998.

11/10/08

6. Lichun Lu, "Modulation of Cell Morphology and Function Using Synthetic Biodegradable Polymers," Ph.D. Thesis, Department of Chemical Engineering, Rice University, May 1999.
7. William T. Godbey, "Poly(Ethylenimine) as a Gene Delivery Vehicle, and Its Potential for Gene Therapy," Ph.D. Thesis, Department of Biochemistry and Cell Biology, Rice University, August 1999.
8. Richard G. Payne, "Development of an Injectable, In Situ Crosslinkable, Degradable Polymeric Carrier for Osteogenic Populations," Ph.D. Thesis, Department of Chemical Engineering, Rice University, October 2001.
9. Gregory N. Bancroft, "Bone Tissue Engineering by Cell and Matrix Transplantation," Ph.D. Thesis, Department of Bioengineering, Rice University, May 2002.
10. Esfandiar Behraves, "Synthesis of an Injectable Biodegradable Biomimetic Macroporous Hydrogel Scaffold for Bone Tissue Engineering," Ph.D. Thesis, Department of Bioengineering, Rice University, August 2002.
11. John P. Fisher, "The Development of a Photocrosslinked Biomaterial for Bone Tissue Engineering Applications," Ph.D. Thesis, Department of Bioengineering, Rice University, October 2002.
12. Mark D. Timmer, "Development of a Biodegradable Interbody Fusion Device," Ph.D. Thesis, Department of Bioengineering, Rice University, July 2003.
13. Heungsoo Shin, "Development of Biodegradable, Biomimetic Hydrogels Modulating Cellular Function for Guided Bone Regeneration," Ph.D. Thesis, Department of Bioengineering, Rice University, August 2003.
14. Johnna S. Temenoff, "Development of Thermally-Crosslinked Hydrogels as Injectable Cell Carriers for Orthopaedic Tissue Engineering," Ph.D. Thesis, Department of Bioengineering, Rice University, August 2003.
15. Jeremy S. Blum, "Development of Genetically Modified Cells for Bone Tissue Regeneration," Ph.D. Thesis, Department of Bioengineering, Rice University, October 2003.
16. Elizabeth L. Hedberg, "Controlled Release of Osteogenic Factors from Injectable Biodegradable Composite Materials for Bone Tissue Engineering," Ph.D. Thesis, Department of Bioengineering, Rice University, April 2004.
17. Manuela E. Gomes, "A Bone Tissue Engineering Strategy Based on Starch Scaffolds and Bone Marrow Cells Cultured in a Flow Perfusion Bioreactor," Department of Polymer Engineering, University of Minho, Portugal, October 2004.
18. Heidi L. Holtorf, "Modulation of Marrow Stromal Cell Differentiation in Bone Tissue Engineering Constructs," Ph.D. Thesis, Department of Bioengineering, Rice University, December 2004.
19. F. Kurtis Kasper, "Investigation of Oligo(Poly(Ethylene Glycol) Fumarate) Hydrogels for Controlled Release of Plasmid DNA," Ph.D. Thesis, Department of Bioengineering, Rice University, September 2005.
20. Theresa A. Holland, "Controlled Growth Factor Delivery from Biodegradable Hydrogel Scaffolds for Articular Cartilage Repair," Ph.D. Thesis, Department of Bioengineering, Rice University, December 2005.
21. Xinfeng Shi, "Development of Injectable Nanocomposite Scaffolds of Single-Walled Carbon Nanotubes and Biodegradable Polymers for Bone Tissue Engineering," Ph.D. Thesis, Department of Bioengineering, Rice University, February 2007.

11/10/08

22. Hansoo Park, "Injectable Cell/Hydrogel Composites for Articular Cartilage Tissue Engineering," Ph.D. Thesis, Department of Bioengineering, Rice University, April 2007.
23. Amit S. Mistry, "Degradation and Biocompatibility of a Fumarate-Based/Alumoxane Nanocomposite for Bone Tissue Engineering," Ph.D. Thesis, Department of Bioengineering, Rice University, April 2007.
24. Zarana S. Patel, "Controlled Delivery of Angiogenic and Osteogenic Growth Factors for Bone Regeneration," Ph.D. Thesis, Department of Bioengineering, Rice University, August 2007.
25. Quynh P. Pham, "Modulation of the Osteoblastic Differentiation of Marrow Stromal Cells for Bone Tissue Engineering," Ph.D. Thesis, Department of Bioengineering, Rice University, December 2007.
26. Simon Young, "The Effect of Simultaneous, Controlled Release of Angiogenic and Osteogenic Growth Factors on the Enhancement of Osteogenesis within Craniofacial Defects," Ph.D. Thesis, Department of Bioengineering, Rice University, May 2008.
27. Matthew B. Murphy, "Targeted Delivery of Osteogenic Drugs for Bone Tissue Engineering," Ph.D. Thesis, Department of Bioengineering, Rice University, May 2008.

M.S. Theses Supervised

1. M. Conley Wake, "Fabrication of Pliable Polymer Scaffolds for Tissue Engineering and Particulate Effects on Osteoblast Function," M.S. Thesis, Department of Chemical Engineering, Rice University, March 1997.
2. Anna C. Jen, "Effects of Mechanical Loading on Osteoblast Function Using a Three-Dimensional Cell/Polymer Construct," M.S. Thesis, Department of Chemical Engineering, Rice University, May 1997.
3. Albert K. Shung, "Synthesis and Characterization of an Injectable Copolymer Hydrogel for Cardiovascular Applications," M.S. Thesis, Department of Bioengineering, Rice University, June 2002.
4. Jeffrey E.-K. Chen, "Evaluation of Adhesive Properties of Poly(Propylene Fumarate) and Fabrication of Laminated Three-Dimensional Scaffolds for Bone Tissue Engineering," M.S. Thesis, Department of Chemical Engineering, Rice University, September 2002.
5. Andrea Haesslein, "Development of Ocular Drug Delivery Systems Using Biodegradable Polymers," M.S. Thesis, Department of Bioengineering, Rice University, April 2007.
6. Sheila A. Moore, "Synthesis and Characterization of Matrix Metalloproteinase Sensitive Hydrogels for Articular Cartilage Engineering," M.S. Thesis, Department of Bioengineering, Rice University, April 2007.

Current Theses Supervision

1. Sue Anne Chew, "Injectable Biodegradable Hydrogels for Multiple Growth Factor Delivery," Ph.D. Thesis, Department of Bioengineering, Rice University (expected completion May 2009).
2. Xuan Guo, "Fabrication of Tissue Engineering Hydrogel Scaffolds of Controlled Architecture," Ph.D. Thesis, Department of Chemical Engineering, Rice University (expected completion May 2009).

11/10/08

3. Jiehong Liao, "Cell and Growth Factor Delivery Using Injectable Biodegradable Hydrogels," Ph.D. Thesis, Department of Bioengineering, Rice University (expected completion May 2009).
4. Anita Saraf, "Development of Non-Viral Biodegradable Polymeric Carriers for Gene Delivery," Ph.D. Thesis, Department of Bioengineering, Rice University (expected completion May 2009).
5. Ana M. Martins, "Development of Biomimetic Biodegradable Scaffolds for Bone Tissue Engineering," Department of Polymer Engineering, University of Minho, Portugal (expected completion May 2009).
6. Leda Klouda, "Calcium-Binding Hydrogels for Guided Bone Regeneration," Ph.D. Thesis, Department of Bioengineering, Rice University (expected completion May 2010).
7. James D. Kretlow, "Injectable, In Situ Hardening Cellular Constructs for Bone Tissue Engineering," Ph.D. Thesis, Department of Bioengineering, Rice University (expected completion May 2010).
8. Richard A. Thibault, "Generation of Osteoinductive Extracellular Matrix Constructs with a Flow Perfusion Bioreactor," Ph.D. Thesis, Department of Bioengineering, Rice University (expected completion May 2011).
9. Emily L. Burdett, "Development of a 3-D Tissue Engineered Cancer Model for Testing Chemotherapeutics," Ph.D. Thesis, Department of Bioengineering, Rice University (expected completion May 2012).
10. Paschalia M. Mountziaris, "Bone Healing Enhancement by Modulation of Molecular Signaling," Ph.D. Thesis, Department of Bioengineering, Rice University (expected completion May 2012).

Teaching Experience

Rice University

BIOE 370 (U/N): "Biomaterials," Fall 2007 and 2008

BIOE 620/CENG 620 (G, N): "Tissue Engineering," Spring 1993, 1995, 1997, 1999, 2000, 2001, 2002, 2003, 2004, 2006, 2007, and 2008

BIOE 420/CENG 420 (U/G, N): "Biosystems Transport and Reaction Processes," Spring 1994, Fall 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2004, 2005, and 2006

CENG 672 (G): "Applied Mathematics I," Fall 1992, 1993, 1994, 1995, 1996, and 1997

CENG 343 (U): "Chemical Engineering Lab," Fall 1993

University of Texas Health Science Center at Houston, Dental Branch

GS210082 (G): "Oral Biomaterials I," Summer 1994 and 1995

M.I.T.

10.362 (U): "Integrated Chemical Engineering," Spring 1991 (with Prof. R. Langer)

U=Undergraduate; G=Graduate; N=New Course Not Previously Given at Rice

11/10/08

Service at Rice University

1992 Organizer, Chemical Engineering Colloquium
 1992- Faculty Associate, Sid Richardson College
 1992-2000 Graduate Recruiting Committee Member, Department of Chemical Engineering
 1992-2000 Library Representative, Department of Chemical Engineering
 1992 Trainer, NIH Minority High School Student Research Apprentice Program
 1993-1994 Graduate Curriculum Committee Member, Bioengineering Program
 1994 Organizing Committee Member, Biochemistry and Cell Biology Retreat
 1994-1996 Organizer, Chemical Engineering Graduate Research Poster Contest
 1994-2000 Steering Committee Member, NIH Biotechnology Training Program
 1995- Faculty Operating Committee Member, Medical Scientist Training Program, Baylor College of Medicine/Rice University
 1996 Organizer, Chemical Engineering Colloquium
 1996 Organizer, Chemical Engineering Graduate Research Symposium
 1996-1997 Undergraduate Curriculum Committee Member, Department of Bioengineering
 1998-2001 Graduate Recruiting Committee Member, Department of Bioengineering
 1999 Faculty Search Committee Member, Department of Bioengineering
 1999-2006 Undergraduate Admissions Committee Member, Rice University
 2001 Organizer, Symposium Celebrating Keck Hall, the New Home of the Department of Bioengineering, and Honoring Professor J. David Hellums
 2000-2001 Awards Committee Chair, Department of Bioengineering
 2000-2001 Faculty Search Committee Chair, Department of Bioengineering
 2001 Trainer, NSBRI High School Student Research Apprentice Program
 2001-2006 Steering Committee Member, NSF IGERT Program
 2002 Faculty Search Committee Member, Department of Bioengineering
 2002-2005 Awards and Mentoring Committee Chair, Department of Bioengineering
 2002- Graduate Academic Affairs Committee Chair, Department of Bioengineering
 2003-2004 Chair Search Committee Member, Department of Bioengineering
 2004-2005 Dean of Engineering Search Committee Member, School of Engineering
 2005- Faculty Search Committee Member, Department of Bioengineering
 2005- Cain Project Faculty Advisory Committee Member, Rice University
 2006- Executive Committee Member, Medical Scientist Training Program, Baylor College of Medicine/Rice University